

Performance Management System

Quarterly Report
July 2017





A Message From the Governor



“Our administration is committed to developing innovative solutions that deliver what Marylanders want – an affordable and reliable transportation system. By implementing a comprehensive program of accountability and continual improvements, we will deliver a better transportation system for the citizens of Maryland.”

“This is another step our administration is taking to Change Maryland for the Better!”

– **Larry Hogan**, *Governor*



The Maryland Department of Transportation and its Transportation Business Units proudly present the official mission statement.



MISSION STATEMENT

“The Maryland Department of Transportation is a customer-driven leader that delivers safe, sustainable, intelligent, and exceptional transportation solutions in order to connect our customers to life’s opportunities.”

A Message From the Secretary

My Fellow Marylanders,

I am proud that the Maryland Department of Transportation Excellerator Performance Management System is in its second year. We have made great strides in developing and implementing performance measures, refining strategies and focusing on delivering results for our customers.

Over the past year, we have created more than 150 individual performance measures that touch every aspect of our business throughout the organization. Whether we are building and maintaining our roads and bridges, running safe and efficient bus and rail systems, operating an international port and airport or improving the vehicle and driver registration process for Marylanders, we stand strong in our commitment and responsibility to deliver the best transportation products and services for our customers.

Every quarter we review our progress and share our results online for public inspection and within the organization through a live stream of our quarterly review meeting.

This allows all 11,000 MDOT employees the opportunity to see the impact of the work they do each day and how they contribute to running a safe and secure transportation system.

Most importantly, we are delivering results. As we respond faster to customer inquiries, become increasingly efficient in using our resources wisely and provide a stronger foundation for economic development for the state, we will continue to deliver exceptional customer service and create more value for those who live and travel throughout Maryland.

I invite you to continue to review our MDOT Excellerator program as we continue down the path of constant progress towards outstanding results.



Pete K. Rahn
Secretary

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Tangible Results

Frequency Driver

Tangible Result # 1: Provide Exceptional Customer Service			Leslie Dews, MVA
1.1	Percent of Overall Customer Satisfaction	Annually (April)	Sean Adgerson, MTA
1.2	Responsiveness to MDOT Customer Correspondence		
	1.2a - Average Number of Days for Correspondence in the MDOT IQ System	Quarterly	Patrick Corcoran, MAA
	1.2b - Percent of First Contact Resolution	Quarterly	Rick Powers, MPA
1.3	Customer Satisfaction with Receiving Goods and Services		
	1.3a - Percent of Abandoned Calls at Call Centers	Quarterly	Darol Smith, MDTA
	1.3b - Average Call Wait Times at Call Centers	Quarterly	Darol Smith, MDTA
	1.3c - Level of Satisfaction with Resolving Call Inquiries at Call Centers	Quarterly	Darol Smith, MDTA
1.4	Customer Satisfaction with Interactions with MDOT Representatives	Annually (April)	Sabrina Bass, TSO
1.5	Customer Satisfaction with Website Information and Navigation of the MDOT Websites		
	1.5a - Percent of Customer Who Felt MDOT Websites Met Their Needs	Annually (April)	Lindsey Franey, SHA
	1.5b - Percent of Customers Who Felt that it was Easy to Find Desired Information on MDOT Websites	Annually (April)	Lindsey Franey, SHA
Tangible Result # 2: Use Resources Wisely			Corey Stottlemeyer, TSO
2.1	Percent Capital Dollars Spent as Programmed	Quarterly	Dan Favarulo, TSO
2.2	Percent of Projects Leveraging Other Funding Sources	Annually (April)	Tony Moore, MPA
2.3	Employee Engagement	Annually (Jan.)	Amber Harvey, MDTA
2.4	Employee Turnover Rate	Quarterly	Bret A. Dousharm, MDTA,
2.5	Time to Fill Vacancies	Quarterly	Debbie Hammel, SHA
2.6	Percent of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets	Annually (Oct.)	Bill Bertrand, SHA
2.7	Managing Capital Assets		
	2.7a - Number of MDOT Structurally Deficient Bridges	Annually (Jan.)	Dan Favarulo, TSO
	2.7b - Percent of SHA and MDTA Roadway Miles with Acceptable (Smooth) Rides	Annually (April)	Sejal Barot, SHA
	2.7c - Rating of Rail in "Good" Condition	Annually (April)	Dan Favarulo, TSO
	2.7d - Percent of Channel Segments with U.S. Army Corps of Engineers Inspection Surveys Less Than or Equal to 1 Year Old	Annually (April)	Dan Favarulo, TSO
	2.7e - Percent of Interstate Pavement in "Acceptable" Condition	Annually (July)	Sejal Barot, SHA
	2.7f - Percent of Non-Interstate NHS Pavement in "Acceptable" Condition	Annually (July)	Sejal Barot, SHA
2.8	Percent of Procurements on Time and on Budget	Annually (Oct.)	Pretam Harry, MVA
2.9	Percent and Value of Unanticipated Contract Modifications	Annually (Oct.)	Pretam Harry, MVA

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2.10	Relationship Between Procurement Competition and Cost	Quarterly	Laura Getty, MTA
2.11	Number of Internal Audit Findings and Number of Repeat Internal Audit Findings	Annually (Oct.)	Patrick Bradley, MAA
2.12	Number of Legislative Repeat Audit Findings	Annually (Jan.)	Patrick Bradley, MAA
2.13	Response to Fraud Hotline Complaints, including Response Time and Effective Resolution	Quarterly	Steve Watson, TSO
2.14	Managing Real Property Assets - UNDER DEVELOPMENT	Annually	David Maier, TSO
Tangible Result # 3: Provide a Safe and Secure Transportation Infrastructure			Sarah Clifford, MDTA
3.1	Number of Crimes Against Persons and Property Committed at MDOT Facilities	Quarterly	Bud Frank, TSO
3.2	Number of Traffic-Related Fatalities on All Roads	Quarterly	Thomas Gianni, MVA
3.3	Maryland Traffic-Related Fatality Rate (Highways)	Annually (Jan.)	Thomas Gianni, MVA
3.4	Number of Traffic-Related Serious Injuries on All Roads	Quarterly	Thomas Gianni, MVA
3.5	Maryland Traffic-Related Serious Injury Rate (Highways)	Annually (Jan.)	Thomas Gianni, MVA
3.6	Maryland Seat Belt Usage Rate	Annually (Jan.)	Gina Watson, MPA
3.7	Disabled Motorist Assisted by MDOT	Quarterly	Cedric Ward, SHA
3.8	Number of Employee Injuries Reported (First Report of Injury)	Quarterly	Cedric Johnson, MAA
3.9	Number of Employee Lost Work Days Due to Injuries	Quarterly	Cedric Johnson, MAA
3.10	Number of Customer Incidents on MDOT Facilities	Quarterly	Phil Thomas, MTA
3.11	Number of Employees Trained Under National Incident Management System (NIMS) - UNDER DEVELOPMENT	Annually (Oct.)	Bud Frank, TSO
Tangible Result # 4: Deliver Transportation Solutions and Services of Great Value			Jason Ridgway, SHA
4.1	Percent of Estimated Project Budget as Compared to Final Project Award	Annually (Oct.)	Terri Lins, MVA
4.2	Percent of Change for Finalized Contracts	Annually (Oct.)	Brian Miller, MPA
4.3	On Time Services and Solutions – Percent of Projects Completed by Original Contract Date	Annually (Oct.)	Bill Appold, TSO
4.4	Average Cost of Common Solutions and Services		
	4.4a - Minor Road Resurfacing	Annually (July)	Jim Harkness, MDTA
	4.4b - Major Road Resurfacing	Annually (July)	Jim Harkness, MDTA
	4.4c - Interstate Resurfacing	Annually (July)	Jim Harkness, MDTA
	4.4d - Average Bridge Replacement Cost	Annually (July)	Jim Harkness, MDTA
	4.4e - Average Bridge Redecking Cost	Annually (July)	Jim Harkness, MDTA
	4.4f - Operating Cost Per Passenger Trip	Annually (Jan.)	Pat Keller, MTA
	4.4g - Operating Cost Per Revenue Vehicle Mile	Annually (Jan.)	Pat Keller, MTA

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	4.4h - Passenger Trip Per Revenue Vehicle Mile	Annually (Jan.)	Pat Keller, MTA
	4.4i - Farebox Recovery Ratio	Annually (Jan.)	Wayne Schuster, MAA
	4.4j - Cost Per Transaction (MVA)	Annually (Jan.)	Wayne Schuster, MAA
Tangible Result # 5: Provide An Efficient, Well Connected Transportation Experience			Phil Sullivan, MTA
5.1	Reliability of the Transportation Experience		
	5.1a - Percentage of Tolls Collected via Cash	Quarterly	Scott Jacobs, MDTA
	5.1b - Average Annual Truck Turn Time Per Container Transaction	Annually (Jan.)	Jeffrey Gutowski, MPA
	5.1c - Average Wait Time MVA	Quarterly	Jeffrey Gutowski, MPA
	5.1d - On Time Performance MTA & MAA	Quarterly	Robert Pond, MTA
	5.1e - Planning Time Index for Highway Travel	Annually (April)	Roxane Mukai, MDTA
5.2	Restoring Transportation Services		
	5.2a - Restoring Transportation Services - Average Time to Restore Normal Operations After Disruptions	Annually (April)	Glenn McLaughlin, SHA
	5.2b - Restoring Transportation Services - Average Time to Restore Normal Operations After a Weather Event	Annually (April)	Glenn McLaughlin, SHA
5.3	Percent of Transportation Services and Products Provided Through Alternate Service Delivery Methods	Semi-Annually (April & Oct.)	Negash Assefa, MVA
5.4	Functionality of Real-Time Information Systems (RTIS)		
	5.4a - Percent of Functional Real-Time Information Systems Provided	Quarterly	Ralign Wells, MAA
	5.4b - Customer Satisfaction with the Accuracy of Real-Time Information Systems Provided	Annually (July)	Ralign Wells, MAA
Tangible Result # 6: Communicate Effectively With Our Customers			Diane Langhorne, TSO
6.1	Communicate Effectively Utilizing Social Media		
	6.1a - Social Reach	Quarterly	Katie Bennett, MDTA
	6.1b - Social Engagement	Quarterly	Richard Scher, MPA
6.2	Satisfaction with Communication at Public Meetings	Quarterly	Sharon Rutzebeck, MVA
6.3	Communicate Effectively through News Releases		
	6.3a - Number of News Stories Generated from Major Releases	Quarterly	Jonathan Dean, MAA
	6.3b - Earned Media Value of Print and Broadcast Coverage Generated by News Releases	Quarterly	Valerie Burnette Edgar, SHA
	6.3c - Earned Media Value of Print and Broadcast Coverage Generated by News Releases	Quarterly	Valerie Burnette Edgar, SHA
6.4	Communicate Effectively to Customers with English Language Barriers at Public Meetings	Quarterly	Lisa Dickerson, TSO
6.5	News Customers Can Use - Proactive Media Stories	Quarterly	Jonathan Dean, MAA

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Tangible Result # 7: Be Fair and Reasonable To Our Partners			Wanda Dade, SHA
7.1	Percentage of Minority Business Enterprise (MBE) Participation Achieved by each Transportation Business Unit	Quarterly	Angela Martin, MAA
7.2	Number and Percent of Contracts Awarded to MBE Firms as the Prime Contractor	Quarterly	Angela Martin, MAA
7.3	Percent of Payments Awarded to Small Business Reserve (SBR) Contracts	Quarterly	Wonza Spann-Nicholas, MPA
7.4	Percent of Veteran Owned Small Business Enterprise (VSBE) Participation	Annually (Jan.)	Natalie Grasso, MVA
7.5	Level of Satisfaction of Our Business Partners	Quarterly	Luther Dolcar, MDTA
7.6	Number and Percent of Invoices Properly Paid to Our Partners in Compliance with State Requirements	Quarterly	David Lynch, MTA
7.7	Number of MDOT Procurement Protests Filed and Percent of Protests Upheld by the Board of Contract Appeals	Quarterly	Mike Zimmerman, TSO
7.8	Economic Impact of Supplier Diversity Program - UNDER DEVELOPMENT	Annually (Oct.)	Tracie Watkins-Rhodes, TSO
Tangible Result # 8: Be a Good Neighbor			Simon Taylor, MAA
8.1	Percent of MDOT Facilities that Meet or Exceed our Neighbor's Expectations	Annually (April)	Anthony Crawford, SHA Tim Cooke, MDTA
8.2	Level of Satisfaction with Educational/Civic Outreach Efforts with our Neighbors		
	8.2a - Number of Educational/Civic Outreach Efforts with our Neighbors	Quarterly	Michael Phennicie, MAA
	8.2b - Satisfaction with the Educational/Civic Outreach Efforts	Annually (April)	Jill Lemke, MPA
8.3	Percent of MDOT Facilities that are ADA Compliant	Annually (April)	Jim Hoover, MTA Terri Whitehead, MVA
8.4	Property Damage Claims - UNDER DEVELOPMENT		
	8.4a Number of Property Damage Claims Filed by TBU - UNDER DEVELOPMENT	Quarterly	Tim Cooke, MDTA
	8.4b Percent of Customers Satisfied with How Their Property Claim Was Handled - UNDER DEVELOPMENT	Quarterly	Tim Cooke, MDTA
8.5	Number of Traffic Violations While Driving a State Vehicle by TBU - UNDER DEVELOPMENT	Quarterly	Dave Seman, TSO
Tangible Result # 9: Be a Good Steward of Our Environment			Dorothy Morrison, TSO
9.1	Water Quality Treatment to Protect and Restore the Chesapeake Bay	Annually (Oct.)	Sonal Ram, SHA
9.2	Fuel Efficiency		
	9.2a - Miles Per Gallon (PM Retained)	Annually (April)	Paul Truntich, MDTA
	9.2b - Total Gallons Consumed	Annually (Oct.)	Paul Truntich, MDTA
9.3	Percent of Maryland Recycling Act Materials Recycled	Annually (April)	Hargurpreet Singh, MVA

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9.4	Recycled/Reused Materials from Maintenance Activities and Construction/Demolition Projects	Annually (April)	Barbara McMahon, MPA
9.5	Compliance with Environmental Requirements	Annually (Oct.)	Robin Bowie, MAA
9.6	Energy Consumption	Quarterly	Laura Rogers, TSO
Tangible Result # 10: Facilitate Economic Opportunity in Maryland			Jim Dwyer, MPA
10.1	Economic Return from Transportation Investment	Annually (Jan.)	John Thomas, SHA
10.2	National Ranking of Maryland's Transportation Infrastructure	Annually (Oct.)	John Thomas, SHA
10.3	Freight Mobility		
	10.3a - Freight Analysis Framework (FAF) Tonnage and Value of Freight	Annually (April)	Juan Torrico, MTA
	10.3b - Port of Baltimore Total International Cargo Tonnage Port-Wide, Market Share and Rankings	Quarterly	Juan Torrico, MTA
	10.3c - MPA Total General Cargo Tonnage including Containers, Autos, RoRos and Imported Forest Product	Quarterly	Deborah Rogers, MVA
10.4	Number and Percentage of Bridges on the State System that are Weight-Posted	Annually (July)	Rafael Espinoza, MDTA
10.5	Change in Market Access due to Improvements in the Transportation Network	Annually (Oct.)	Corey Stottlemeyer, TSO
10.6	Change in Productivity due to Improvements in the Transportation Network	Annually (Oct.)	Corey Stottlemeyer, TSO
10.7	Total User Cost Savings for the Traveling Public Due to Congestion Management	Annually (Jan.)	John Thomas, SHA
10.8	Percent of Vehicles Miles Traveled (VMT) in Congested Conditions on Maryland Freeways and Arterials in the AM/PM Peak Hours	Annually (Jan.)	John Thomas, SHA
10.9	Market Share		
	10.9a – Percent of Nonstop Markets Served Relative to Benchmark Airports	Quarterly	Jack Cahalan, MAA
	10.9b - Martin State Airport's Regional Market Share	Quarterly	Jack Cahalan, MAA
	10.9c - Number of Passengers and Departing Flights Relative to Benchmark Airports	Quarterly	Jack Cahalan, MAA
10.10	Percent of Roadway Access Permits Issued within 21 Days or Less	Annually (Jan.)	Glen Carter, TSO

TANGIBLE RESULT #1

Provide Exceptional Customer Service



Every MDOT employee is responsible for delivering exceptional customer service by providing customers with respectful, timely and knowledgeable responses to all inquiries and interactions.

RESULT DRIVER:

Leslie Dews

Motor Vehicle Administration (MVA)

Provide Exceptional Customer Service

TANGIBLE RESULT DRIVER:

Leslie Dews
Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Sean Adgerson
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To track MDOT's progress towards its mission of providing exceptional customer service.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

Data is collected through a standardized survey of randomly selected Marylanders.

NATIONAL BENCHMARK:

Industry leaders according to the American Customer Service Index.

PERFORMANCE MEASURE 1.1

Percent of Overall Customer Satisfaction

Marylanders expect MDOT to deliver exceptional services and products. Measuring the percent of overall customer satisfaction is the best way to determine how the Department is doing in the delivery of that service. It also identifies areas of strength and areas of opportunities or weaknesses to address.

For calendar year 2016, MDOT's overall customer satisfaction rating was 76 percent based on the survey conducted by MDOT, which is down 3.4 points from 2015. Compared to the American Customer Satisfaction Index (ACSI), the results are 11.5 points below the highest ranked companies of Chick-fil-a and Lincoln.

MDOT has been working with the University of Baltimore to develop a standardized annual survey of Marylanders that will be used as the sole record for determining overall customer satisfaction rating. This survey will also provide information on the friendliness and professionalism of employees, the accuracy and thoroughness of the work, the upkeep of facilities, and the timeliness of the services provided.

In addition to the standardization of the survey results, the business units have been actively implementing programs and service enhancements that have a direct influence on the quality of the services and products offered. Some of those changes include:

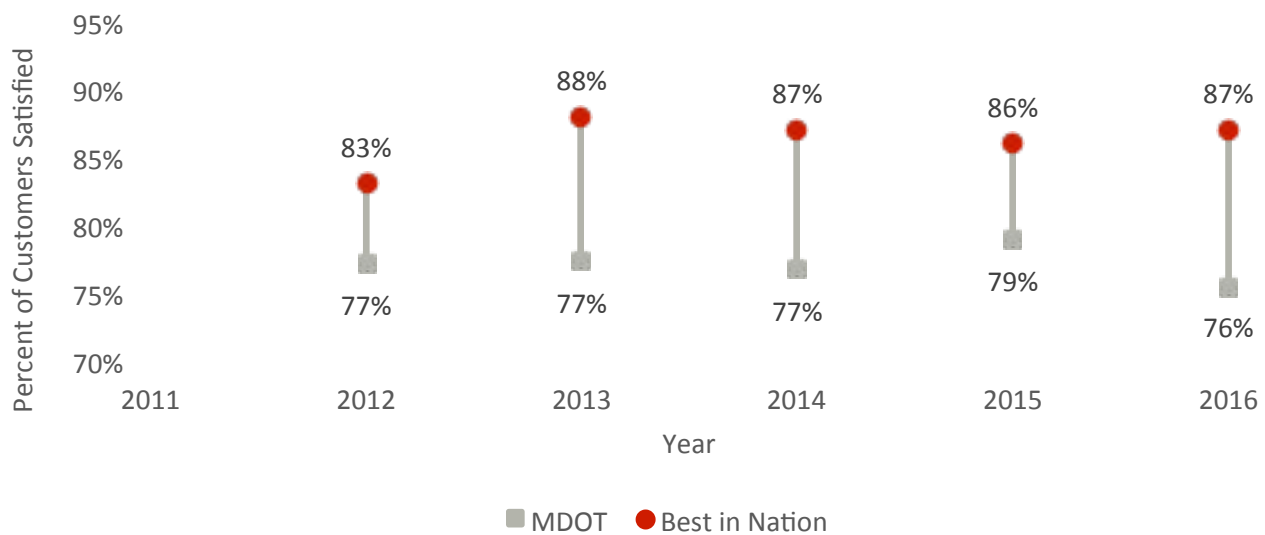
- Mandatory customer service training for all employees at TBUs and the development of customer service plans, aligned with the Governor's statewide customer service initiatives.
- Implementation of several different customer enhancements including kiosks, handheld electronic devices, new systems, and facilities improvements to increase efficiency and convenience for customers to conduct transactions with MDOT.

Provide Exceptional Customer Service

PERFORMANCE MEASURE 1.1

Percent of Overall Customer Satisfaction

Chart 1.1: Percent of Overall MDOT Customer Satisfaction vs. Best in Nation 2012-2016



Provide Exceptional Customer Service

TANGIBLE RESULT DRIVER:

Leslie Dews

Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Patrick Corcoran

Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To track responsiveness to customer inquiries.

FREQUENCY:

Quarterly (Data is Monthly)

DATA COLLECTION METHODOLOGY:

MDOT IQ system.

NATIONAL BENCHMARK:

30 days (MDOT established benchmark).

PERFORMANCE MEASURE 1.2A

Responsiveness to MDOT Customer Correspondence: Average Number of Days for Correspondence in the MDOT IQ System

Timely response to customer correspondence communicates the importance MDOT places on addressing customer needs and demonstrates the organization's commitment to exceptional customer service. In addition, inquiries, service requests, ideas and concerns conveyed in customer correspondence often identifies opportunities to improve the overall customer experience and satisfaction with MDOT.

As shown in Chart 1.2A.3, for the period of January 1-March 31, 2017, the average number of days for MDOT response to customer correspondence assigned by the Governor's Office was 22 days. This represents a significant improvement considering that MDOT had letters as old as 200 days in CY 2016.

MDOT has made significant improvement in responsiveness to customer correspondence by establishing clear guidelines and processes for correspondence management standard across TBUs, creating a mandatory training program with MDOT specific training materials available online, coordinating with the Governor's Office on to training and processing customer correspondence, and making enhancements to the IQ system to ensure consistent and accurate reporting and to provide specific management reports for review.

In addition, a working team has been established to review internal processes at TBUs for managing all customer contact, identify efficiencies and best practices and define uniform standards for all mediums of customer contact (letters, email, phone, etc.) regardless of origin.

Provide Exceptional Customer Service

PERFORMANCE MEASURE 1.2A

Responsiveness to MDOT Customer Correspondence: Average Number of Days for Correspondence in the MDOT IQ System

Chart 1.2A.1: Average Number of Days to Respond to Correspondence in MDOT IQ System by TBU FY2017

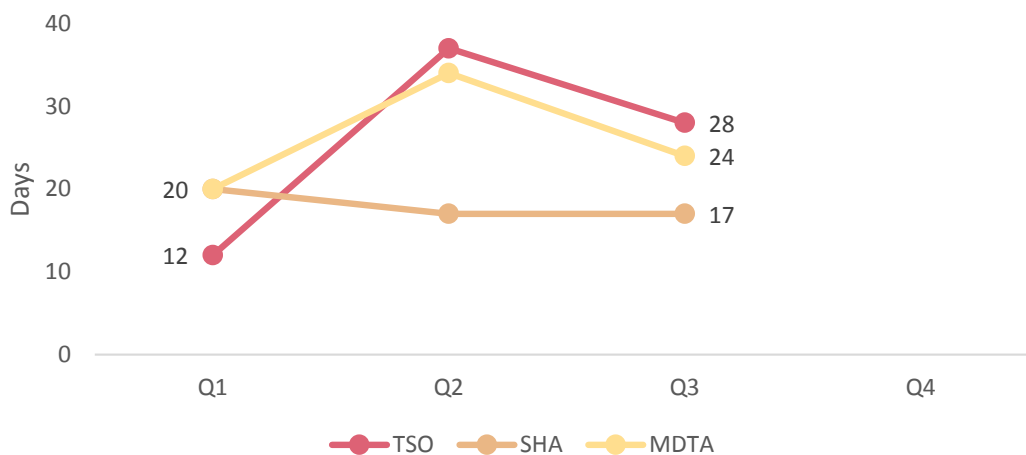
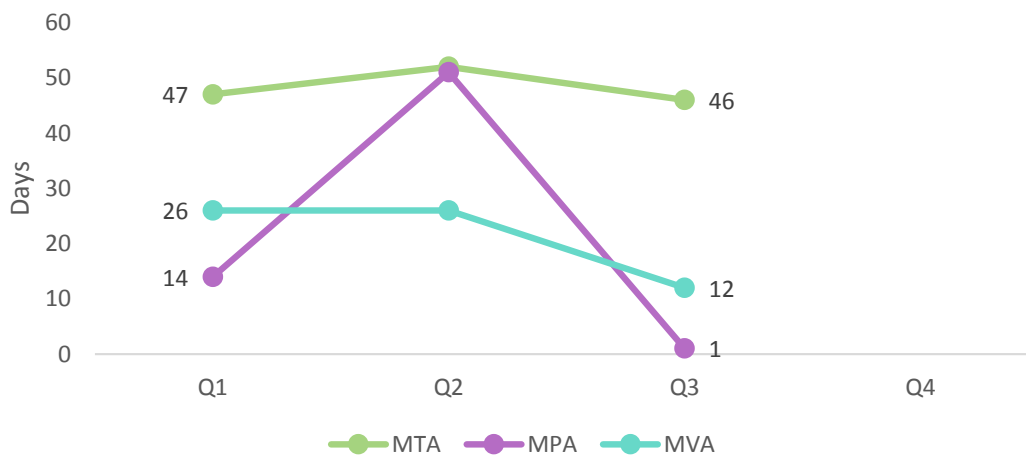


Chart 1.2A.2: Average Number of Days to Respond to Correspondence in MDOT IQ System by TBU FY2017

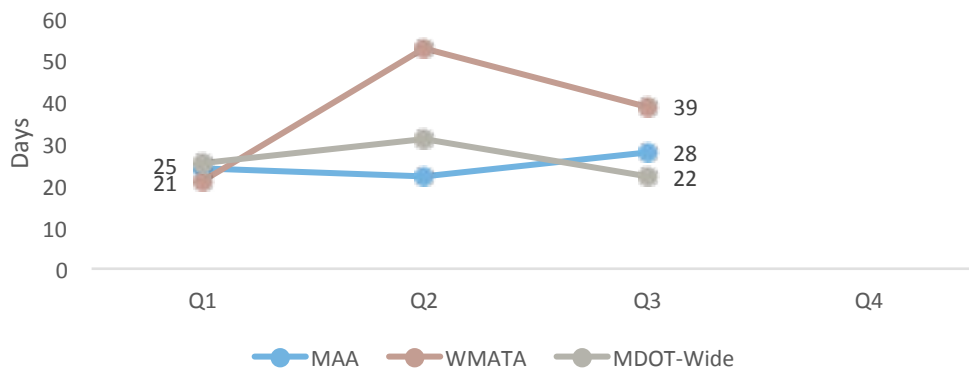


Provide Exceptional Customer Service

PERFORMANCE MEASURE 1.2A

Responsiveness to MDOT Customer Correspondence: Average Number of Days for Correspondence in the MDOT IQ System

Chart 1.2A.3: Average Number of Days to Respond to Correspondence in MDOT IQ System by TBU FY2017



Provide Exceptional Customer Service

TANGIBLE RESULT DRIVER:

Leslie Dews

Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Richard Powers

Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To track the rate of first contact resolution to MDOT customer correspondence to ensure responsiveness to customer needs.

FREQUENCY:

Quarterly (Data is Monthly)

DATA COLLECTION METHODOLOGY:

Database Metrics Provided by TBUs.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 1.2B

Responsiveness to MDOT Customer Correspondence: Percent of First Contact Resolution

Improving MDOT's ability to address customer requests, issues and concerns in one interaction ensures fast and accurate service to customers and improves their overall perception of the effectiveness of the organization and satisfaction with goods and services received. Performance in first contact resolution also identifies the level of efficiency in operations and opportunities for improvement.

For the period January 1-March 31, 2017, MVA and MTA submitted data regarding first contact resolution for customer correspondence received. Chart 1.2B.1 shows MVA achieved 100 percent first contact resolution. Likewise, Chart 1.2B.2 shows that MTA realized 95 percent first contact resolution compared to 93 percent in Q4 of 2016.

MDOT continues to work on the development of a comprehensive approach for managing customer contact across TBUs. As reported previously, a review of existing systems and processes for customer contact management is underway. Ultimately, the solution will ensure that the organization provides exceptional service to customers in a manner that is responsive, timely, consistent and reflective of the varying means of customer engagement.

Provide Exceptional Customer Service

PERFORMANCE MEASURE 1.2B

Responsiveness to MDOT Customer Correspondence: Percent of First Contact Resolution

Chart 1.2B.1: MVA Percent of First Contact Resolution Q3 FY2017

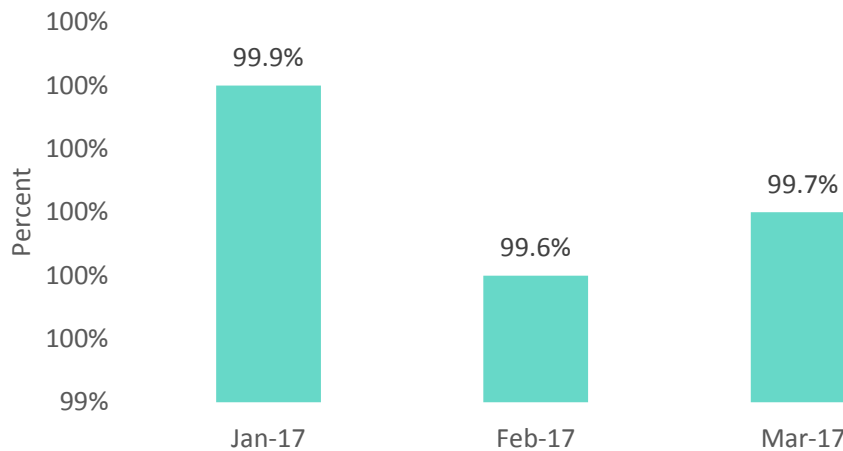
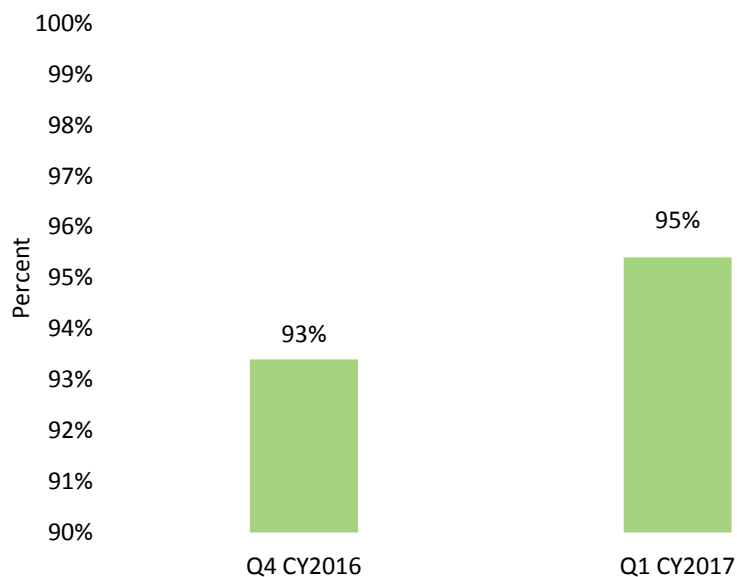


Chart 1.2B.2: MTA First Contact Resolution within One Day



Provide Exceptional Customer Service

TANGIBLE RESULT DRIVER:

Leslie Dews

Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Darol Smith

Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To identify the percentage of customers not connecting or speaking with call centers resulting from not receiving goods or services from MDOT.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Database metrics provided by TBUs. Calculated formula abandoned calls divided by total inbound calls – in percent.

NATIONAL BENCHMARK:

Seven percent average sampled industry leader (no national industry standard available).

PERFORMANCE MEASURE 1.3A

Customer Satisfaction with Receiving Goods and Services: Percent of Abandoned Calls at Call Centers

Reducing the rate of abandoned calls to MDOT call centers ensures more customers are able to reach MDOT representatives and have their needs addressed. The longer customers wait before being connected to a call center agent, the higher the abandon rate, negatively impacting their level of satisfaction with the goods and services received from the organization.

As shown in Chart 1.3A.1, the abandonment rate for the period January 1 – March 31 2017 was 7 percent. MDOT continues to improve performance in this area achieving the benchmark level of 7 percent and maintaining a positive trend in each of the previous years when comparing Q1 of CY 2017 results of 7 percent abandonment rate to 12 percent during the same period in CY 2016, 13 percent in CY 2015 and 12 percent in CY 2014.

Targeted process improvements and other changes are influencing the positive results at individual TBU call center operations. Changes undertaken to enhance the performance of MDOT call center operations include:

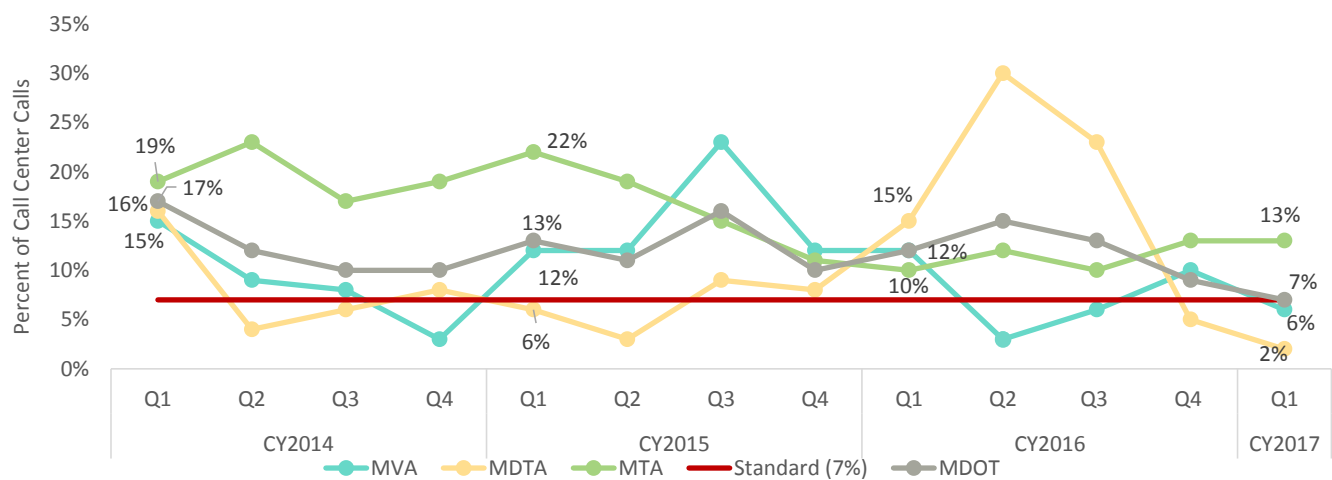
- Conducting biweekly meetings with call center representatives across MDOT TBUs to share operational and customer service best practices and call center needs
- Augmenting staffing resources to address customer demand
- Implementing call triage process to reduce call wait times
- Revamping Interactive Voice Response (IVRs) so that customers can reach agents or conduct phone transactions more rapidly
- Expanded hours

Provide Exceptional Customer Service

PERFORMANCE MEASURE 1.3A

Customer Satisfaction with Receiving Goods and Services: Percent of Abandoned Calls at Call Centers

Chart 1.3A.1: Percent of Abandoned Calls at MDOT Call Centers CY2014-CY2017



Provide Exceptional Customer Service

TANGIBLE RESULT DRIVER:

Leslie Dews

Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Darol Smith

Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To collect and evaluate the time it takes the average customer to wait before speaking with the call center to answer phone inquiries.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Database metrics provided by TBUs. Average amount of time caller waits.

NATIONAL BENCHMARK:

60 seconds average sampled industry leaders (no national industry standards available).

PERFORMANCE MEASURE 1.3B

Customer Satisfaction with Receiving Goods and Services: Average Call Wait Times at Call Centers

Providing consistent and responsive service to is a top priority for MDOT. Reducing the time it takes for customers to reach MDOT call center representatives ensures customer needs are addressed more rapidly and increases their satisfaction with the support and overall customer service provided. This measurement can also identify opportunities (additional training, changes in technology, etc.) for managers to improve operational efficiency and performance.

For the period January 1 – March 31 2017, Chart 1.3B.1 shows that the average call wait time was 1:46, compared to 2:12 in the previous quarter. The current performance level remains significantly higher than the benchmark of 60 seconds; however, MDOT collectively continues a positive performance trend in this critical measure of customer service. In comparing the 1:46 call wait time for Q1 of CY 2017 to 4:17 during the same period in CY 2014, 3:21 in CY 2015 and 2:24 in CY 2016, MDOT has clearly demonstrated progress.

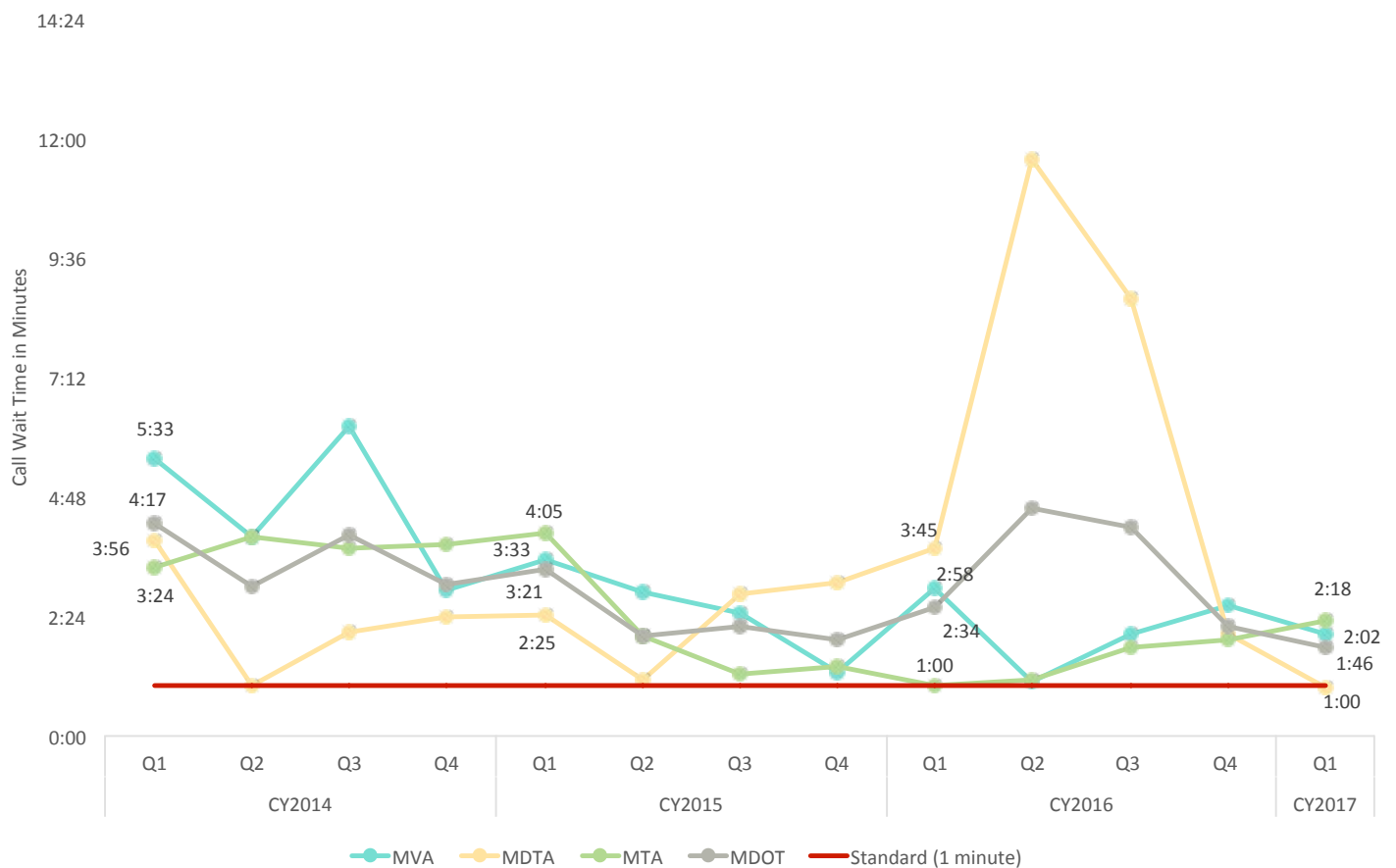
As previously mentioned, targeted process improvements such as collaboration across TBU call centers, staff augmentation, adoption of best practices and other operational and technology changes are influencing the positive direction for MDOT call center operations.

Provide Exceptional Customer Service

PERFORMANCE MEASURE 1.3B

Customer Satisfaction with Receiving Goods and Services: Average Call Wait Times at Call Centers

Chart 1.3B.1: Average Call Wait Times at MDOT Call Centers CY2014-CY2017



Provide Exceptional Customer Service

TANGIBLE RESULT DRIVER:

Leslie Dews

Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Darol Smith

Maryland Transportation Authority
(MDTA)

PURPOSE OF MEASURE:

To assess customer satisfaction with call centers in resolving call inquiries.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Phone survey of call center customers.

NATIONAL BENCHMARK:

82 percent average sampled industry leaders (no national industry standard available).

PERFORMANCE MEASURE 1.3C

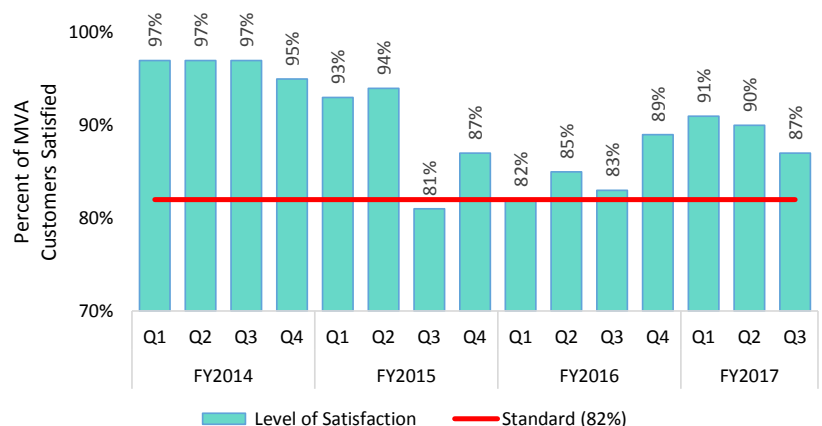
Customer Satisfaction with Receiving Goods and Services: Level of Satisfaction with Resolving Call Inquiries at Call Centers

The level of satisfaction with resolving call inquiries indicates whether MDOT is meeting customers' expectations. MVA is currently the only call center that has a data collection mechanism in place for this performance measure.

As shown in Chart 1.3C.1, for the period January 1 – March 31, 2017, MVA achieved 87 percent average level of satisfaction with resolving call inquiries which is favorable to the benchmark of 82 percent. This data continues to illustrate a trend back to prior TBU achievement levels that are better than the benchmark in place today.

As mentioned previously, focus on process improvement and other changes are influencing the positive results at MDOT call centers. MDOT continues to work on a mechanism to capture customer satisfaction for all TBU call centers. Changes to the MVA call center to enhance customer service and performance include consolidating call center operations, expanding hours and implementing a call triage process to reduce call wait times.

**Chart 1.3C.1: Level of Satisfaction with Resolving MVA Call Inquiries
FY2014-FY2017**



Provide Exceptional Customer Service

TANGIBLE RESULT DRIVER:

Leslie Dews

Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Sabrina Bass

The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To better determine how satisfied MDOT customers are when interacting with MDOT representatives.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

Data is collected through a survey design utilizing an on-site, in-person intercept method, complemented by online surveys.

NATIONAL BENCHMARK:

Industry leaders according to the American Customer Service Index.

PERFORMANCE MEASURE 1.4

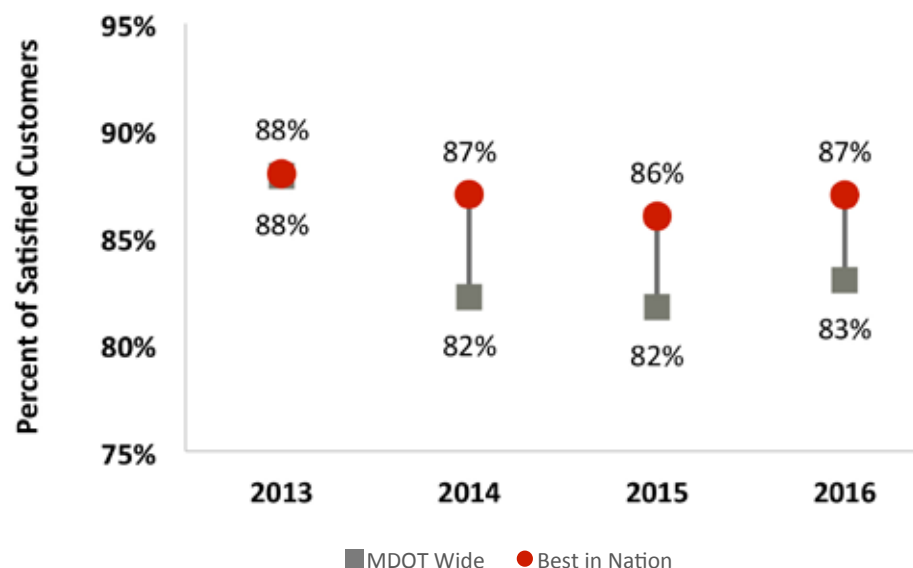
Customer Satisfaction with Interactions with MDOT Representatives

Ensuring that every customer contacting MDOT has access to knowledgeable, professional and courteous MDOT representatives improves overall customer experience and builds trust in the organization and its products and services.

For calendar year 2016, MVA and SHA submitted data on overall satisfaction with interactions with MDOT representatives derived from front-line surveys. Chart 1.4.1 shows that 83 percent of customers agreed that MDOT representatives were professional and respectful during their interactions compared to the Best in Nation benchmark of 87 percent.

MDOT continues to implement strategies to improve customer service. Each TBU has a customer service plan that includes mandatory customer service training for all employees, which aligns with the Governor's statewide customer service initiative. Additionally, a measurement of customer satisfaction with MDOT representatives has been incorporated in the standardized annual survey MDOT developed and will allow for the capture of data for this measure across all TBUs. The results will be used to enhance training and improve customer service provided by MDOT representatives.

Chart 1.4.1: Customer Satisfaction with Interaction with MDOT Representatives CY2013-CY2016



Provide Exceptional Customer Service

TANGIBLE RESULT DRIVER:

Leslie Dews

Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Lindsey Franey

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To show how satisfied MDOT customers are when interacting with the website and usefulness of the information.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

On-line Survey.

NATIONAL BENCHMARK:

American Customer Service Index (ACSI) e business report average of highest annual scores for social media, portal/ search engine and news/ opinion websites.

PERFORMANCE MEASURE 1.5A

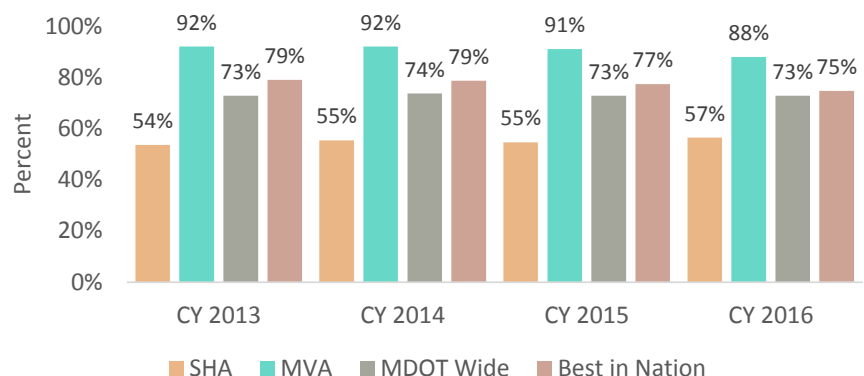
Percent of Customers Who Felt MDOT Websites Met Their Needs

Customers expect 21st century interactions with MDOT. Improving the quality of MDOT websites ensures customers have access to information, and can request services and process transactions at their convenience. This further enhances the level of customer service provided by the Agency.

For 2016, Chart 1.5A.1 shows that 56.5 percent of SHA customers found SHA's website to be helpful while 88 percent of eMVA customers would recommend MVA's website. The ACSI benchmark for 2016 was 74.67 percent favorability.

To ensure continuous improvement with customer satisfaction with MDOT websites, an online survey, which better mirrors the ACSI benchmarks, has been developed and is now live on all TBU homepages. Information derived from the surveys will allow the identification of opportunities for improvement for all MDOT websites to better meet the needs of customers.

Chart 1.5A.1: Percent of Customers Who Felt MDOT Websites Met their Needs CY2013-CY2016



Provide Exceptional Customer Service

TANGIBLE RESULT DRIVER:

Leslie Dews

Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:

Lindsey Franey

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To show how satisfied MDOT customers are when interacting with the website and usefulness of the information.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

On-line Survey

NATIONAL BENCHMARK:

ACSI e business report average of highest annual scores for social media, portal/search engine and news/opinion websites with specifics on ease of use, ease of navigation and site performance.

PERFORMANCE MEASURE 1.5B

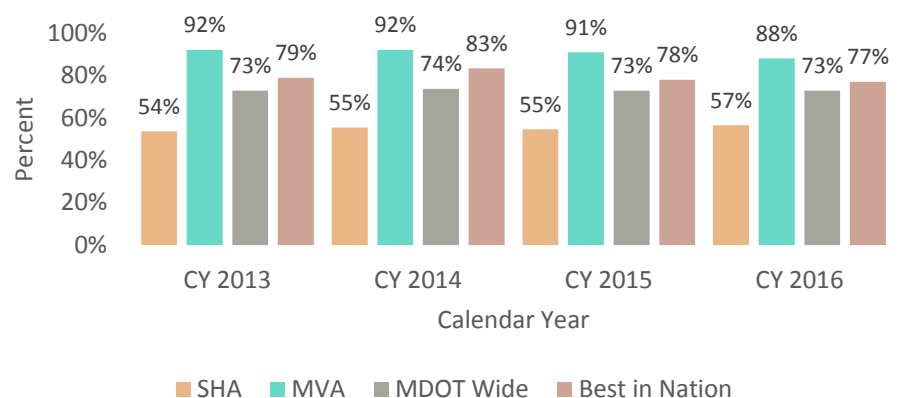
Percent of Customers Who Felt that it was Easy to Find Desired Information on MDOT Websites

MDOT's considerable online presence enables customers to report and obtain information on goods and services as well as process transactions. The quality of MDOT's websites is a key component in providing exceptional customer service. To improve customer satisfaction, websites must be structured, and information presented, in a way to ensure the ease of navigation for customers to find what they want quickly.

Existing survey results for 2016 indicated that 56.5 percent of SHA customers found SHA's website to be helpful while 88 percent of eMVA customers would recommend MVA's website. The ACSI benchmark for 2016 was 77 percent favorability.

In 2016 not all TBUs were capturing data to determine if customers felt that their attempts to find desired information on MDOT websites was effortless. All TBUs now have links to take a survey that better tracks the ACSI benchmarks. All TBUs went live in mid-February 2017. Data derived from the surveys will be used to identify improvements in MDOT websites to enhance ability of customers to find information on the website.

Chart 1.5B.1: Percent of Customers Who Felt that it was Easy to Find Desired Information on MDOT Websites CY2013-CY2016



TANGIBLE RESULT #2

Use Resources Wisely



MDOT receives resources from our customers and they expect products and services in return. To better serve our customers, MDOT must maximize the value of every dollar we spend.

RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Dan Favarulo

The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To track the efficiency of capital spending.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Track capital project spending versus the Consolidated Transportation Plan programmed funds.

NATIONAL BENCHMARK:

N/A

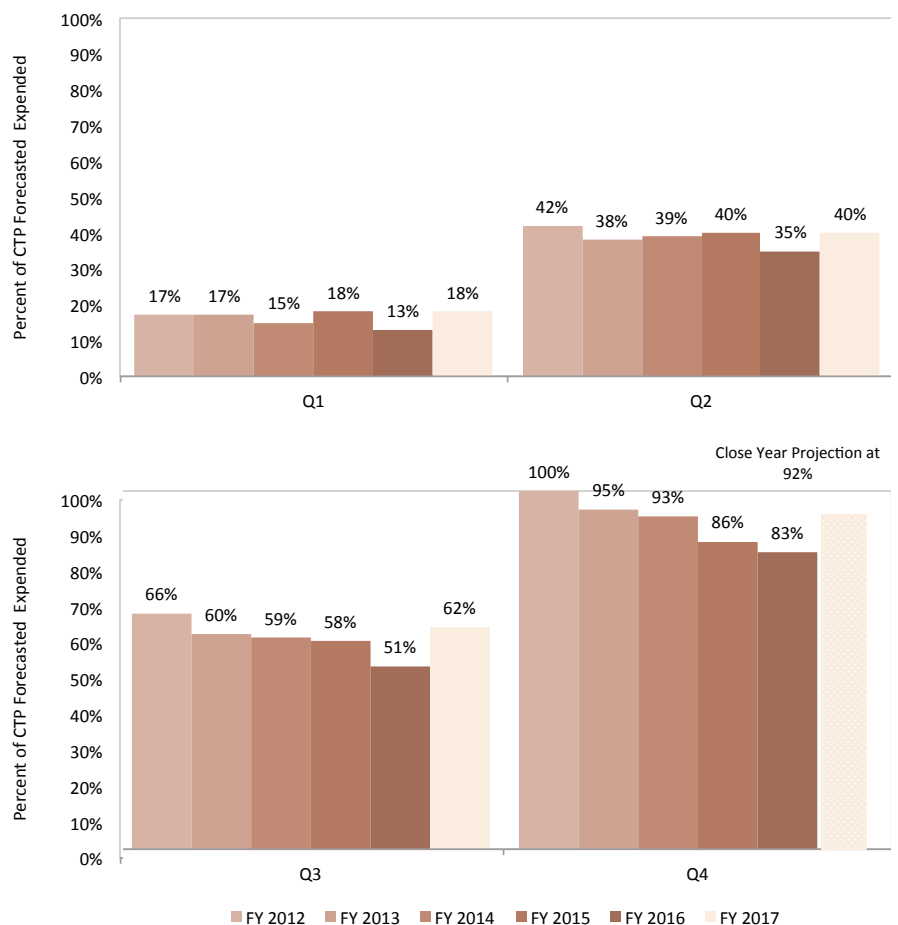
PERFORMANCE MEASURE 2.1

Percent Capital Dollars Spent as Programmed

The purpose of this measure is to show MDOT's customers that the Department is delivering on the capital projects and funding programmed in the annual Consolidated Transportation Program (CTP). MDOT evaluates this measure by tracking capital funding expenditure rates and monitoring the reasons why expenditure levels are falling short or exceeding CTP programmed amounts.

In the 3rd quarter of FY2017, MDOT's capital program spending rate was at 62 percent of CTP forecasted funds expended, which is 3 percent higher than the historic average of 59 percent expended at this time of year. MDOT's latest capital forecast is predicting a 92 percent expenditure rate in FY 2017.

Chart 2.1.1: Six years Expenditure Rate Analysis (Federal & State)



PERFORMANCE MEASURE 2.1

Percent Capital Dollars Spent as Programmed

Below is a breakdown by each TBU's current expenditure rate compared to the historic percent expended by the 3rd quarter from previous years.

Chart 2.1.2: 3-Year Expenditure Rate by TBU at 3Q Mark, State/Federal/Toll FY2015-FY2017

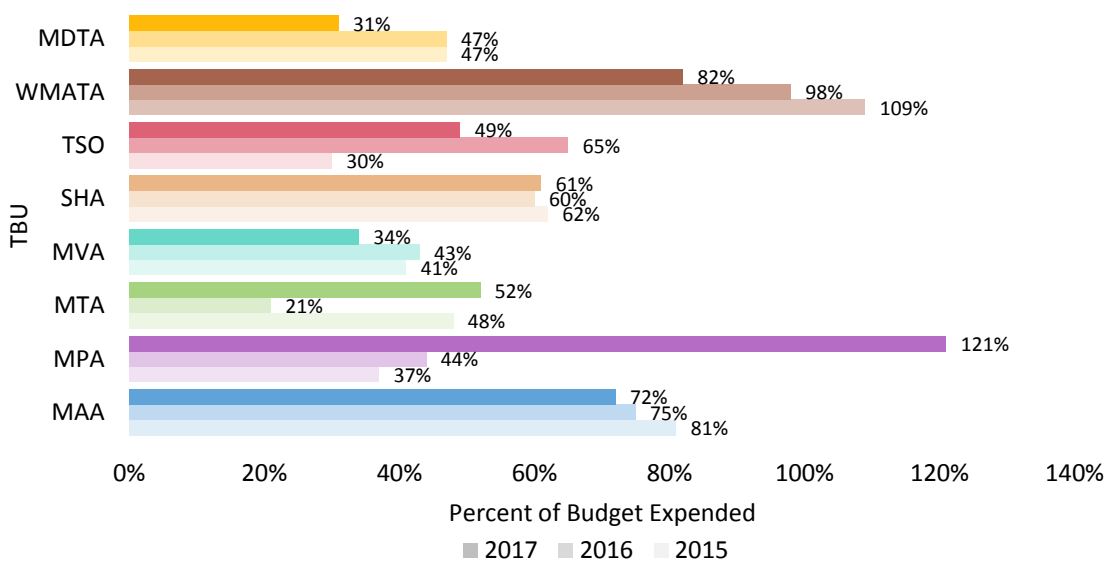


Chart 2.1.3: Reasons for Over-Programming FY2017

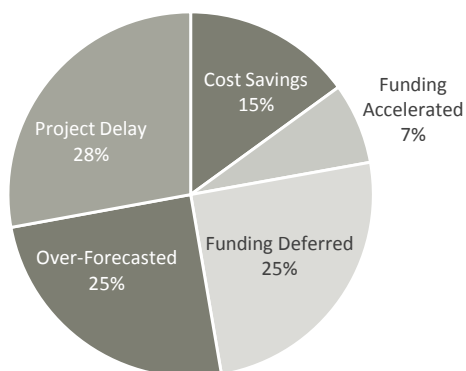
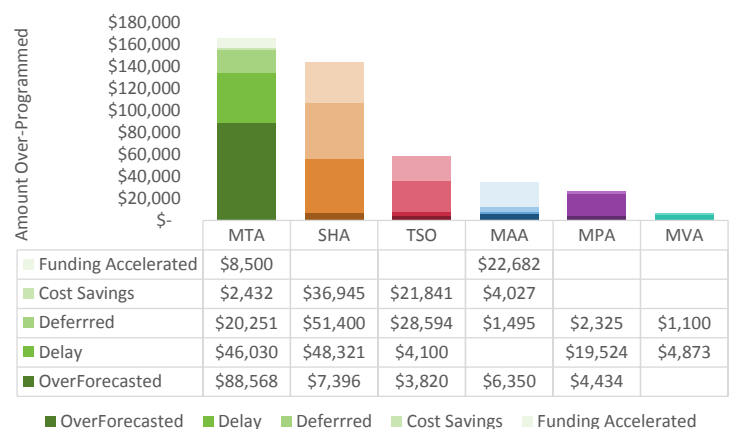


Chart 2.1.4: Reasons for Over-Programming by TBU FY2017



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Tony Moore

Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To measure the amount of other sources of dollars utilized to fund capital projects as an indicator of MDOT's efforts to leverage its finite resources.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

This measure will track county/ local contributions, private contributions, and federal discretionary funding received each year towards projects.

NATIONAL BENCHMARK:

N/A

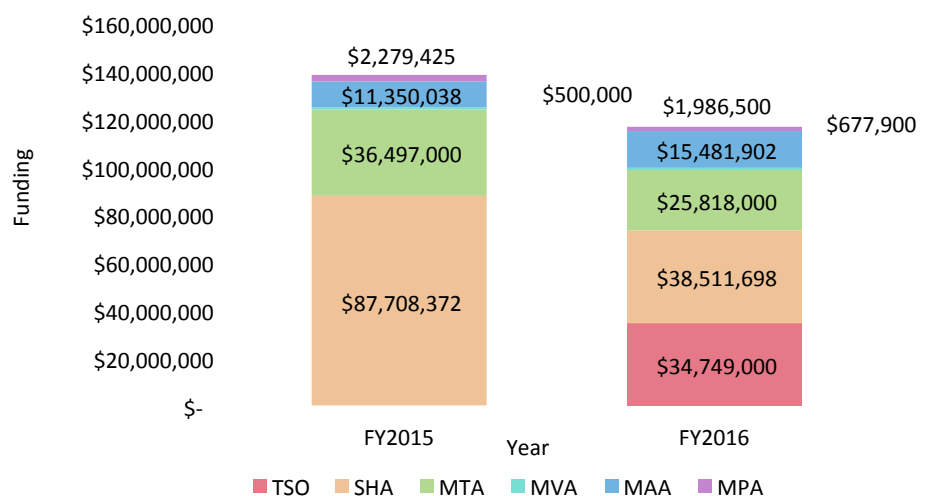
PERFORMANCE MEASURE 2.2

Percent of Projects Leveraging Other Funding Sources

The purpose of this measure is to track and highlight instances to leverage Transportation Trust Fund (TTF) dollars with local and private dollars to better understand how MDOT is using its finite financial resources.

MDOT leveraged \$117 million in other funding in FY2016. This represents roughly 5 percent of the total FY2017 capital program expended. Most of this funding was leveraged by SHA through private contributions, MTA through Purple Line enabling projects, and TSO through the award of discretionary funding for the Maglev project.

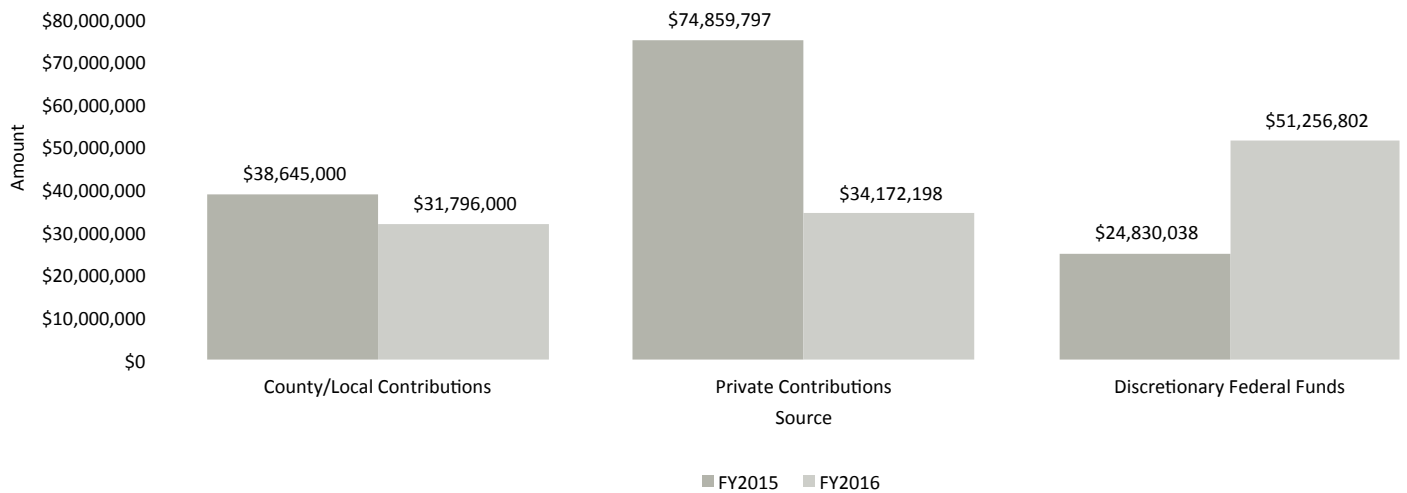
Chart 2.2.1: Other Funding Leveraged by TBU FY2015-FY2016



PERFORMANCE MEASURE 2.2

Percent of Projects Leveraging Other Funding Sources

Chart 2.2.2: Amount of Other Funding Leveraged By Source, FY2015-FY2016



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Amber Harvey

Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To track the commitment of employees in furthering MDOT's reputation, mission and interests by identifying key motivators and obstacles in the workplace.

FREQUENCY:

Annually

DATA COLLECTION METHODOLOGY:

An MDOT employee engagement survey administered to all employees. Online and hard copies will be made available, and Cloud-based and mobile platforms are a consideration.

NATIONAL BENCHMARK:

Gallup 2015 national engagement percentages:

32 percent engaged employees

50.8 percent not engaged

17.2 percent actively disengaged

PERFORMANCE MEASURE 2.3

Employee Engagement

Engagement accounts for the emotional commitment an employee has for MDOT and the amount of discretionary effort the employee expends on behalf of the Department. Engaged employees go beyond what they "have to do" to what they "want to do" for MDOT and its customers.

In early 2017, MDOT embarked on its first ever department-wide Employee Feedback Survey that:

- Eliminates redundant efforts and minimizes expense by combining talent and resources;
- Ensures a systematic and consistent approach to employee engagement across all MDOT business units;
- Accurately gauges the workforce climate to develop and prioritizes new business strategies and;
- Is a feasible, flexible and sustainable resource for future use.

MDOT partnered with Towson University's Regional Economic Studies Institute (RESI) to develop and administer the feedback survey across all TBUs and the more than 10,000 employee workforce. The survey was open January 10, 2017 – February 7, 2017 with online and paper options available. As shown in Table 2.3.1, nearly 4,500 employees participated in "Shaping the Future of MDOT, Together" for a 44.5 percent total response rate. MDOT is greatly encouraged by the participation and collaboration in this initiative. Table 2.3.2 gives an overview of the response rates from similar surveys administered by other state governments.

RESI completed a comprehensive analysis and presented its final report to MDOT Leadership in May 2017. The report was made available to all MDOT employees as part of an intranet video message from Secretary Rahn. The results indicated positive trends in employee retention and working relationships and also noted some constructive areas for improvement. A process improvement team has been chartered to develop recommendations and implementation strategies to address the concerns.

PERFORMANCE MEASURE 2.3 Employee Engagement

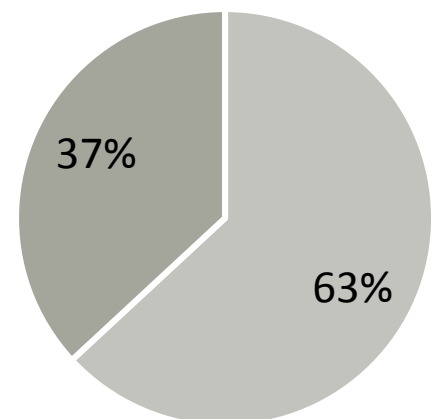
Table 2.3.1: CY2016 MDOT Employee Feedback Survey Response Rates

TBU	Number of Survey Responses	Number of Employees	Response Rate
MAA	248	471	52.7%
MPA	136	192	70.8%
MTA	803	3,202	25.1%
MVA	690	1,628	42.4%
SHA	1,382	2,701	51.2%
MDTA	659	1,561	42.2%
TSO	172	286	60.1%
No TBU Selected	374	N/A	N/A
TOTAL	4,464	10,041	44.5%

Table 2.3.2: Survey Response Rates for Other Government Systems

Entity	Year	Completed Surveys	Response Rate
California	2015	2,604	52%
Illinois	2015	19,380	39.9%
Illinois Department of Transportation	2015	–	33.9%
Michigan	2015	31,833	71%
Michigan Department of Transportation	2015	2,046	75%
Vermont	2016	4,506	55.7%
Vermont Department of Transportation	2016	524	50.6%
Washington	2015	42,669	72%
Washington Department of Transportation	2015	3,360	49%
Federal	2016	407,789	45.8%
Federal Department of Transportation	2016	14,871	49.8%

Chart 2.3.1: Would you consider MDOT to have a positive workplace environment?



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Bret A. Dousharm
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To identify the percentage of employees who leave MDOT and analyze trends in voluntary and involuntary separations.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Quarterly reports of employee separations are provided by TSO HRIS Unit. These reports show the number of separations during a given period of time for each TBU broken down by all available separation codes (i.e. reasons).

NATIONAL BENCHMARK:

U.S. Department of Labor (DOL) Bureau of Labor Statistics for U.S. state and local governments.

PERFORMANCE MEASURE 2.4

Employee Turnover Rate

Annual employee turnover rate is the ratio of total separations, both voluntary and involuntary, compared to the average number of employees during the given timeframe, expressed as a percentage. The Human Resource Information System (HRIS) Unit in the Human Resources Division of TSO provides the total number of employees and total number of separations for each TBU on a quarterly basis. The national benchmark was determined by utilizing the U.S. Bureau of Labor Statistics' Job Opening and Labor Turnover Survey (JOLTS) data for U.S. state and local governments (excluding education, seasonally adjusted) total employee separations.

Chart 2.4.1 compares the turnover rate of each TBU for the 3rd quarter (Q3) of FY 2016 and FY 2017. Chart 2.4.2 compares the MDOT total turnover rate to the national average for state and local governments. MDOT remains slightly above the national average.

PERFORMANCE MEASURE 2.4 Employee Turnover Rate

Chart 2.4.1: TBU Employee Turnover Rate, Seasonal Comparison of 3rd Quarter, FY2016 vs. FY2017

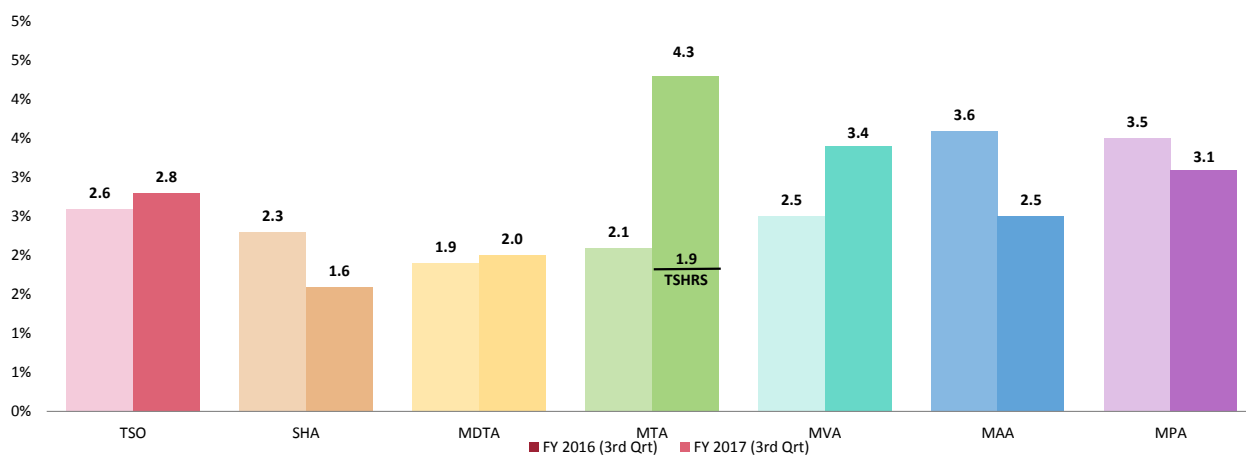
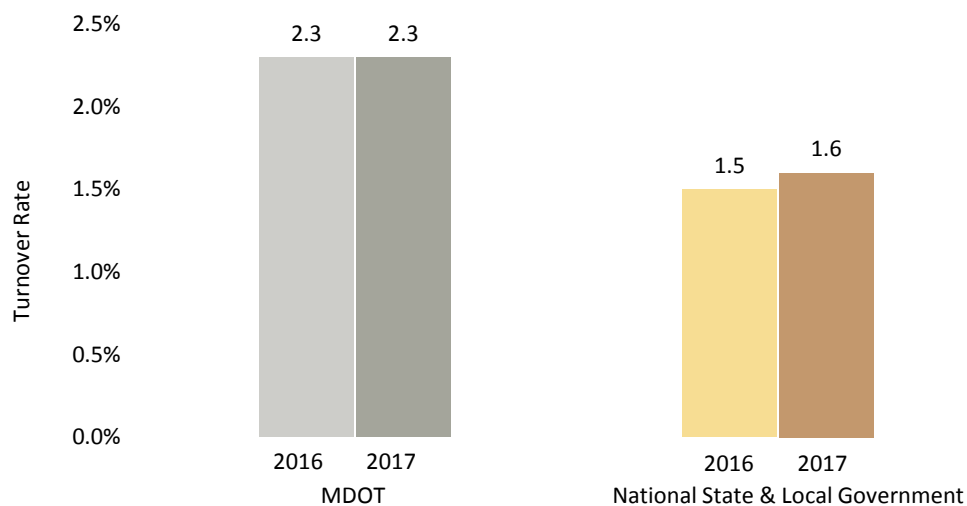


Chart 2.4.2: Employee Turnover Rate, Seasonal Comparison of 3rd Quarter, FY2016 vs. FY2017

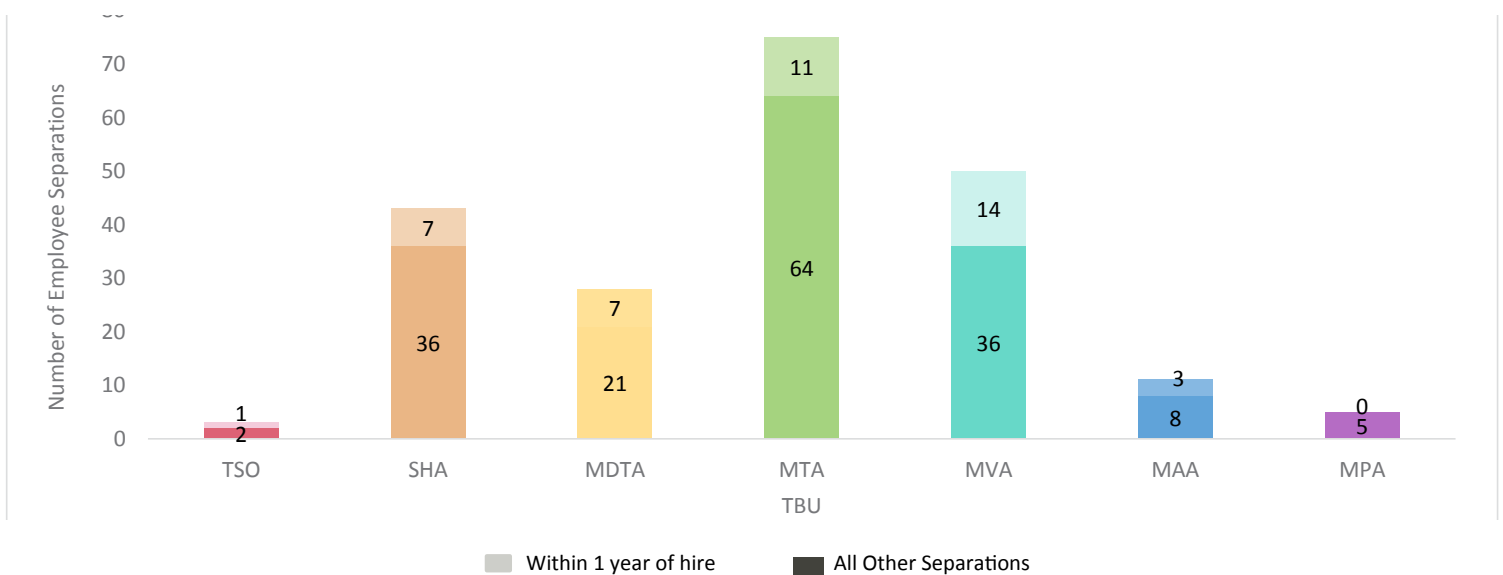


PERFORMANCE MEASURE 2.4

Employee Turnover Rate

One notable element that continues to be important in analyzing MDOT turnover is the employee separations that occur within one year from the date of hire. Chart 2.4.3 illustrates the number of newly hired employees that have separated from MDOT in comparison to all other separations occurring in Q3 of FY 2017. This data reflects that 20 percent of all employee separations during this timeframe occurred within the first year of hire. This is a four percentage point increase from Q2 of FY 2017.

Chart 2.4.3: Q3 FY2017 Employee Separations

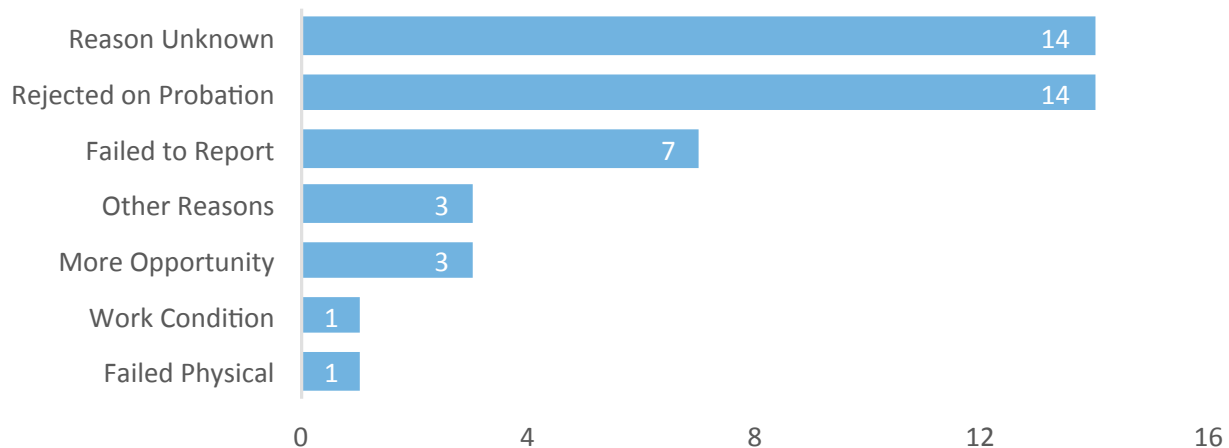


PERFORMANCE MEASURE 2.4

Employee Turnover Rate

Several action strategies are underway to address employee turnover concerns. In October 2016, MTA successfully identified and resolved a payroll system coding limitation that now allows the appropriate reason for separation to be tracked for all MTA employees, including TSHRS and union employees. Properly identifying the reason these employees choose to leave MDOT is a crucial factor in developing successful business practices to retain a healthy workforce and lower turnover costs. In addition, MDOT-TSO collected exit interview procedures and materials from all TBUs and a review of these materials is underway to determine best practices and areas for improvement. TSO is also leading the effort of developing a MDOT employee separation policy to document and standardize necessary procedures.

Chart 2.4.4: Q3 FY2017 Separations Within One Year of Hire



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Deborah Hammel

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To demonstrate efficient use of available positions and identify opportunities for improvement in recruitment and selection processes.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Quarterly report for MDOT and each TBU from HRIS housed at TSO and spreadsheets completed by TBU Human Resource Offices.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.5

Time to Fill Vacancies

Reducing the time it takes to fill vacant positions will increase MDOT's staffing levels, improving the ability to deliver projects on time and rapidly address emergencies affecting the transportation system.

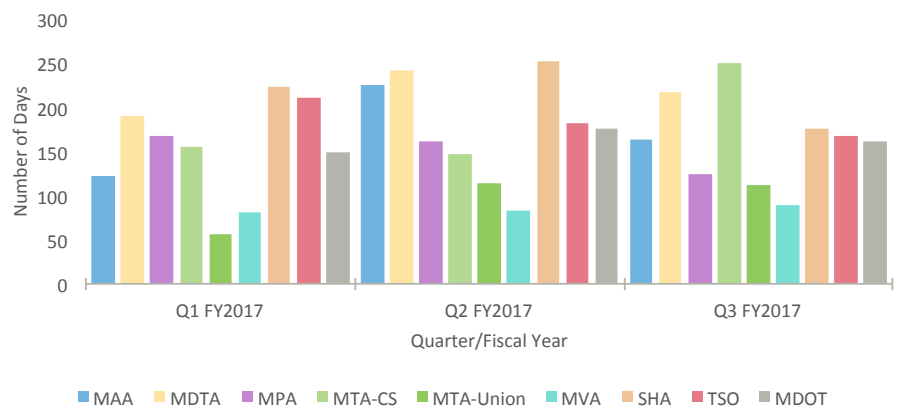
Average time to fill vacancies is slowly coming down in most TBUs. MDOT-wide the average for the third quarter of FY2017 is 162.6 days, down from 176.12 days in the second quarter.

Three quarters of specific TBU data shows a large portion of the time to fill is from interview to hire date. It is taking anywhere from 40 to 60 days after interviews are conducted to have employees start work for reasons beyond our control:

- Recruitments are conducted for some positions on an annual or semi-annual basis, and candidates are hired as vacancies occur for up to 6 months after interviews.
- Entry level engineers may be interviewed several months in advance of their graduation.

A number of MDOT-wide initiatives are underway to improve hiring times including development of a process to fill oldest vacant Personal Identification Numbers (PINs) first, and a full review of recruitment and selection processes to identify and change or eliminate unnecessary and/or redundant activities that add time without adding value.

Chart 2.5.1: Average Time to Fill Vacancies by TBU FY2017



PERFORMANCE MEASURE 2.5 Time to Fill Vacancies

Chart 2.5.2: Average Time to Fill Vacancies Q2 FY2017

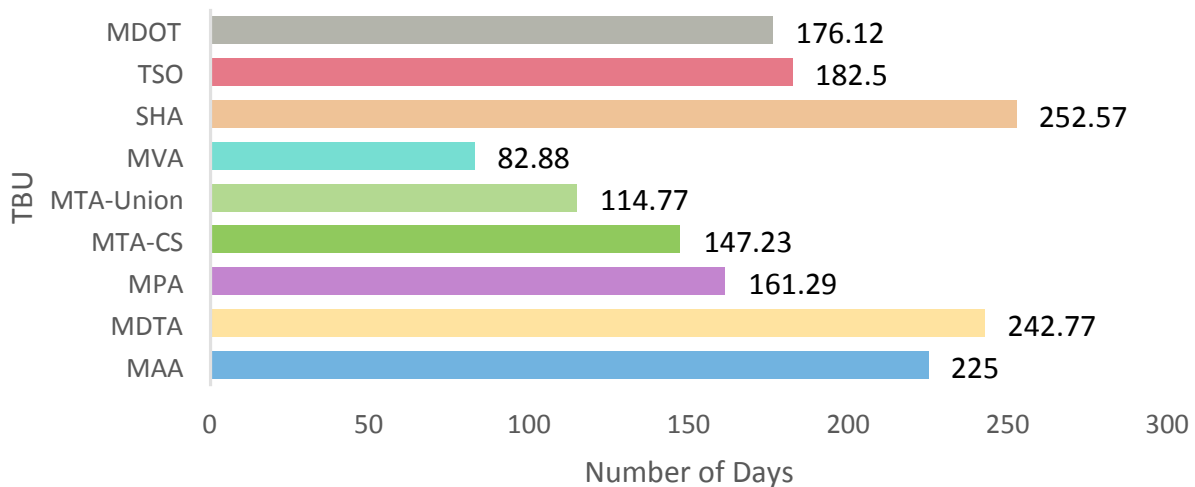
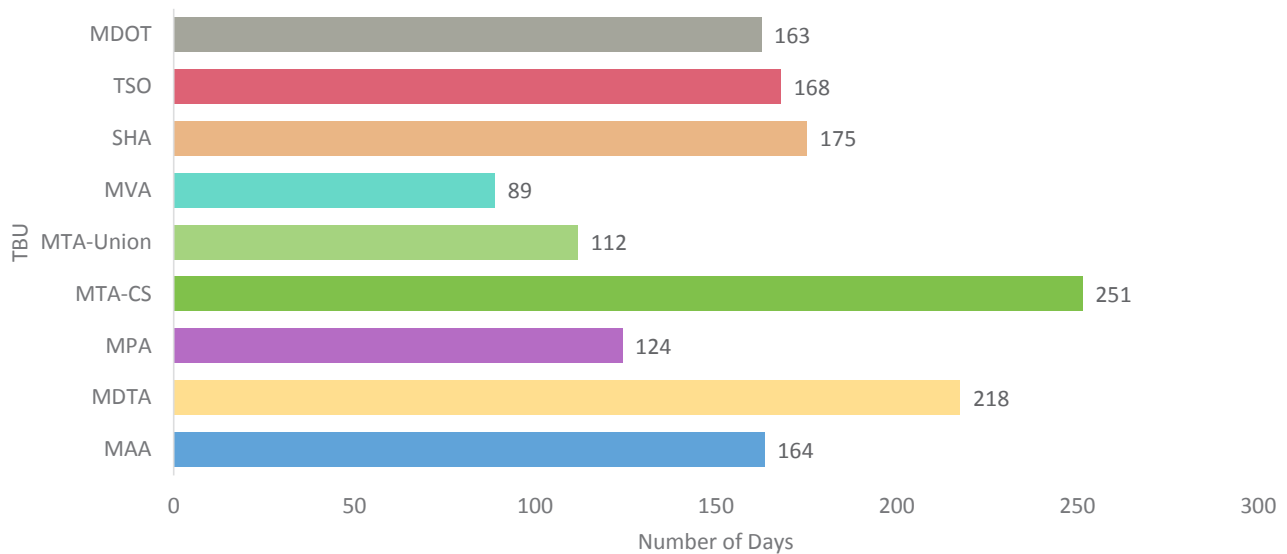


Chart 2.5.3: Average Time to Fill Vacancies Q3 FY2017



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Bill Bertrand
State Highway Administration (SHA)

PURPOSE OF MEASURE:

To calculate the percentage of fixed asset units counted during the Annual Physical Inventory of Fixed Assets as an indicator of how well MDOT records, safeguards, and efficiently controls fixed assets.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Data will be collected when the business units conduct annual fixed asset physical inventories.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.6

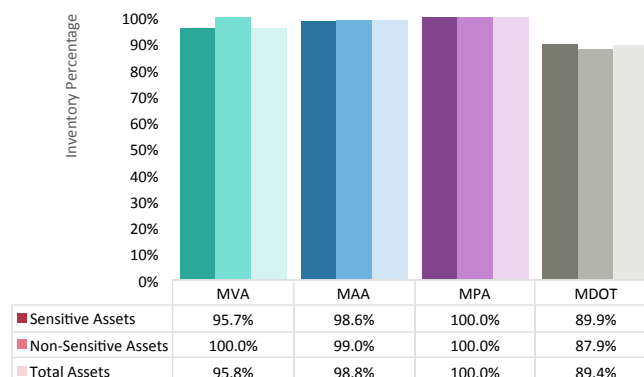
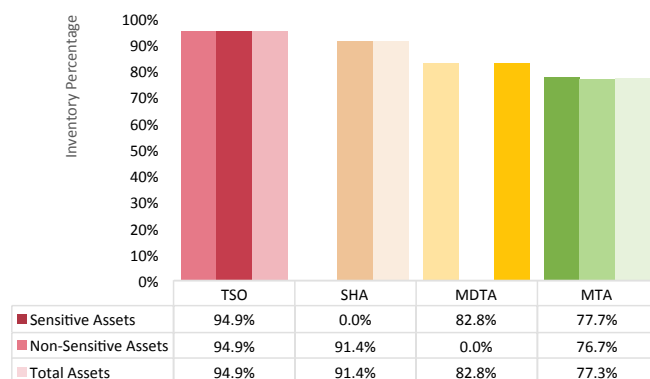
Percentage of Fixed Asset Units Identified or Accounted for during the Annual Physical Inventory of Fixed Assets

This performance measure is intended to emphasize the importance of stewardship and internal controls with respect to fixed assets owned by each of MDOT's business units. This performance measure reports the percentage of fixed assets counted by each TBU during its annual fixed asset physical inventory versus the number of fixed assets recorded in each business unit's official inventory records.

A regularly-conducted physical inventory of fixed assets ensures accurate information for the management of assets and discourages fraud.

Currently, five of seven business units conduct a full inventory of non-sensitive items once every three years and a full inventory of sensitive items annually. The remaining business units, MAA and SHA, conduct a full inventory of both sensitive and non-sensitive items annually.

Chart 2.6.1: Physical Inventory by TBU 2015



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Sejal Barot

Highway Administration (SHA)

Dan Favarulo

The Secretary's Office (TSO)

PURPOSE OF MEASURE:

Provide an overview which shows how TBUs monitor asset management activities.

FREQUENCY:

Annually

DATA COLLECTION METHODOLOGY:

Asset inspection condition and asset life-cycle cost analyses are compiled at the TBU level.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.7

Managing Capital Assets

Customers deserve to know that MDOT is strategically managing its diverse capital assets. Each TBU maintains its physical assets according to policies that minimize asset life-cycle cost while avoiding negative impacts on the delivery of transit services.

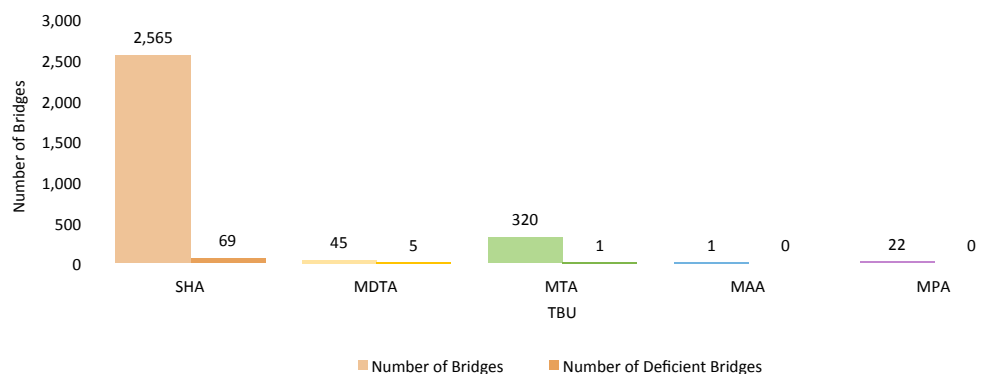
MTA, SHA, MAA, MDTA and MPA perform annual bridge inspections per Federal guidelines to assess a rating, which is used to determine if any remedy is required to keep bridges structurally sound.

SHA and MDTA monitor the condition of pavement and road ride smoothness. It is based upon the International Roughness Index (IRI) Pavement Criteria, which is the most commonly used measure worldwide for evaluating and managing road systems. Monitoring is performed using annual road inspections.

MTA monitors rail conditions for MTA Metro and Light Rail systems using TERM Lite evaluation software to evaluate guideway, track work and special structures. Evaluation will occur during an annual asset inventory.

MPA utilizes U.S. Army Corps of Engineers bay channel annual inspection surveys to monitor the dredging depth for shipping access channels to the Port of Baltimore.

Chart 2.7A.1: Number of Structurally Deficient Bridges FY2016



PERFORMANCE MEASURE 2.7 Managing Capital Assets

Chart 2.7B.1: Percent of SHA and MDTA Roadway Miles with Acceptable (Smooth) Rides CY2011-CY2016

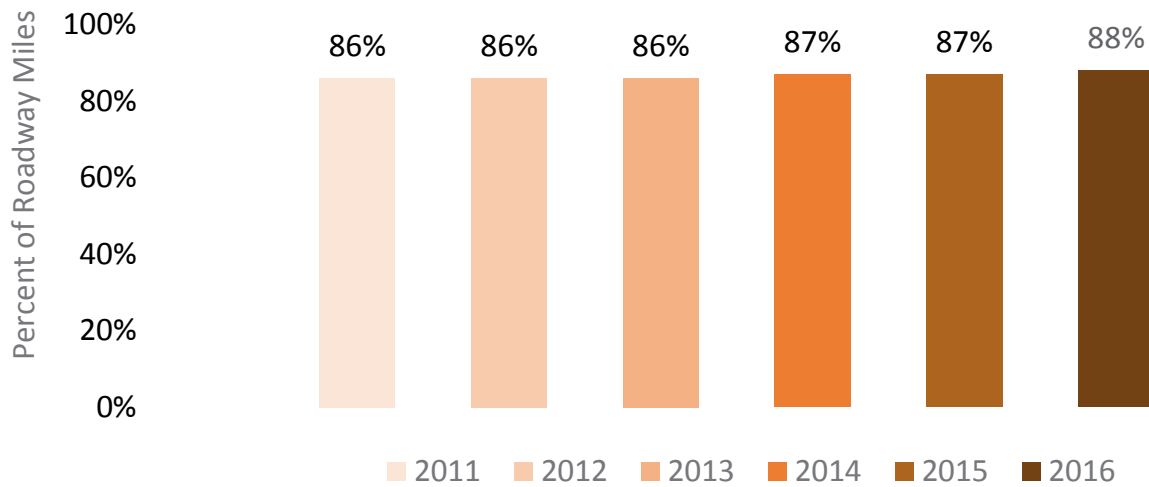
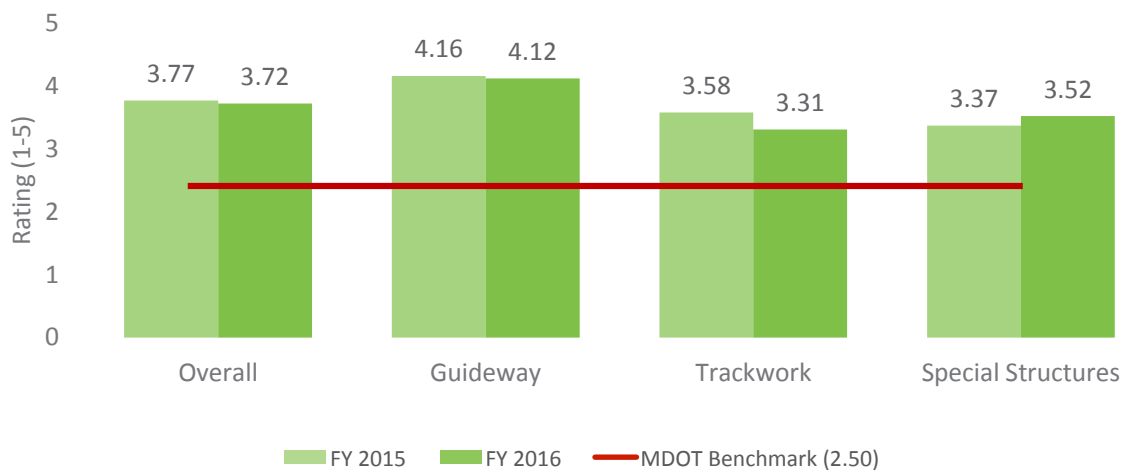


Chart 2.7C.1: Rating of Baltimore Metro Rail in "Good" Condition (>2.5) FY2015-FY2016



PERFORMANCE MEASURE 2.7 Managing Capital Assets

Chart 2.7C.2: Rating of Light Rail in "Good" Condition (>2.5) FY2015-FY2016

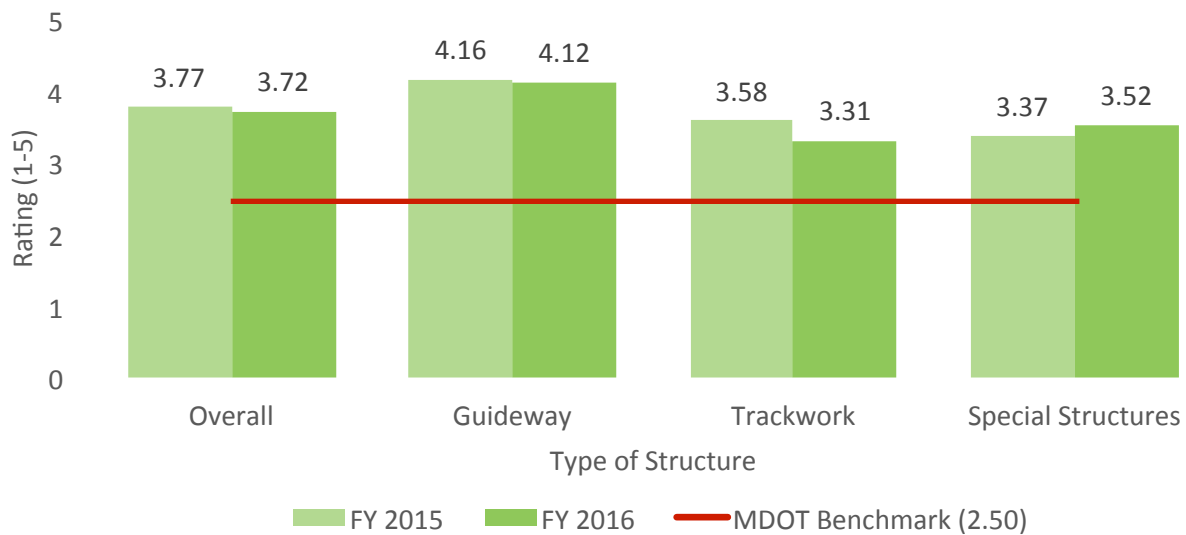
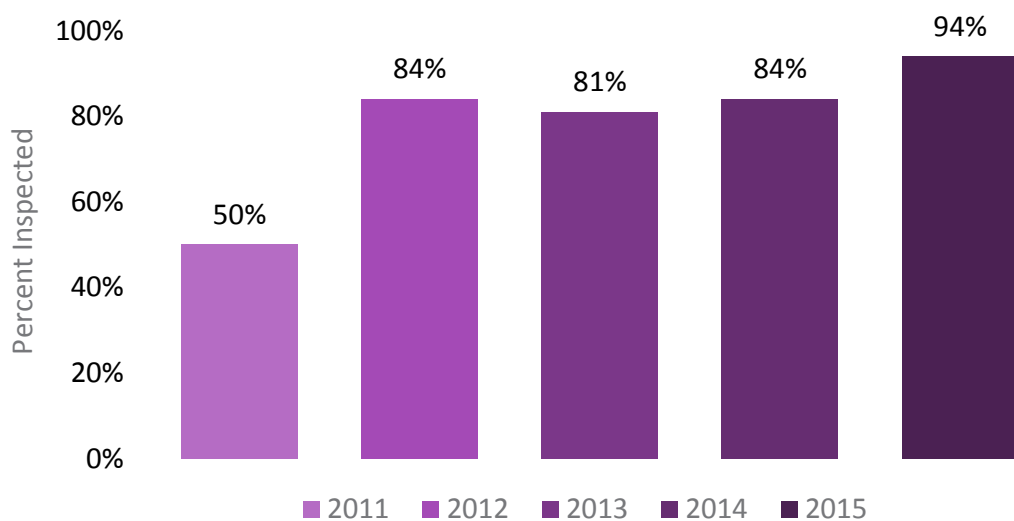


Chart 2.7D.1: Percent of Bay Channel Inspected CY2011-CY2015



PERFORMANCE MEASURE 2.7 Managing Capital Assets

Chart 2.7E.1: Percent of Interstate Pavement in "Acceptable" Condition CY2011-CY2016

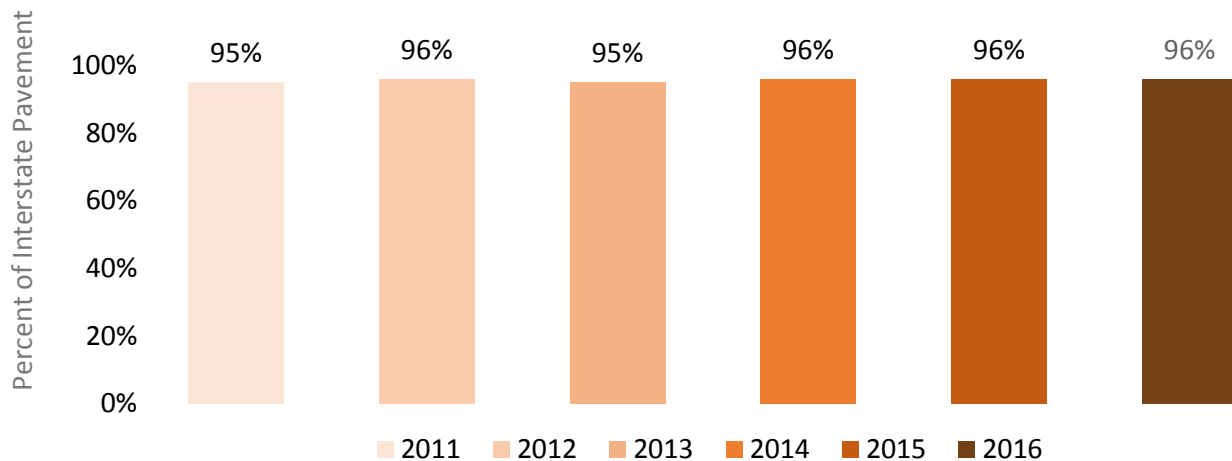
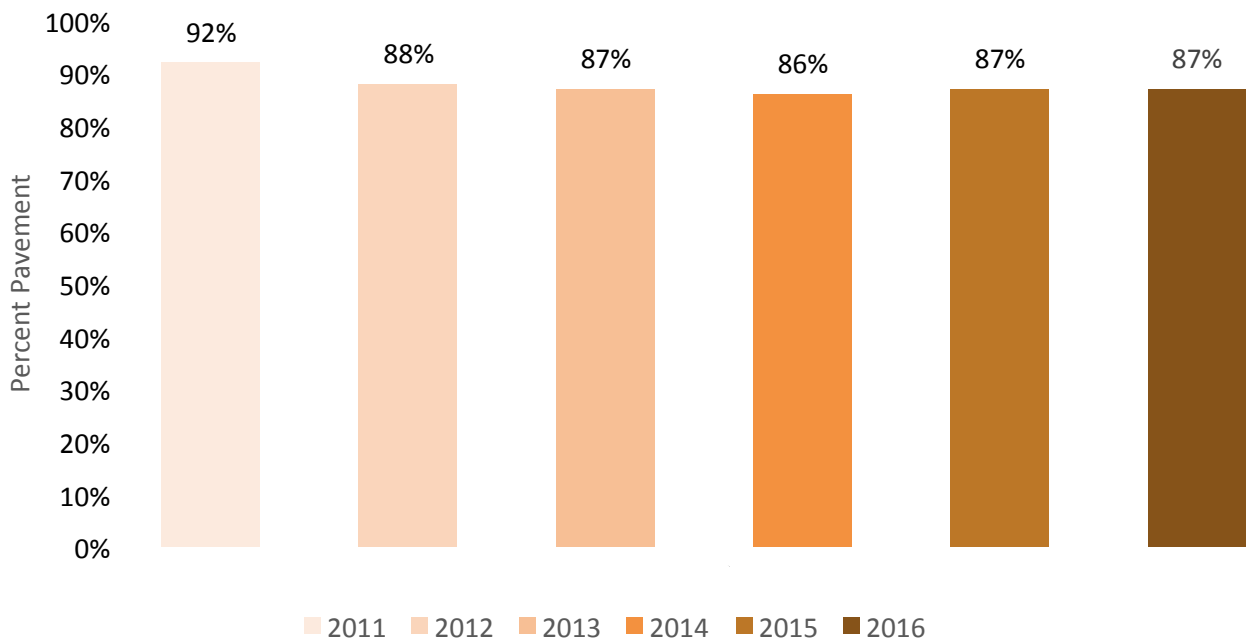


Chart 2.7F.1: Percent of Non-Interstate Pavement in "Acceptable" Condition CY2011-CY2016



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Pretam Harry

Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track the timeliness and ability to match the budgets of the procurement process to be more efficient in contracts.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Focus reports MDOT wide showing all active Blanket Purchase Order (BPO) for the fiscal year.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.8

Percent of Procurement on Time and on Budget

The purpose of this measure is to encourage all managers to proactively monitor and manage each of their procurements to make sure that they are in line with the project and budget in an effort to improve overall contracting efficiencies. Over time, managers will do a better job at setting timelines and budgets for projects. Managers will report the project status accurately and in a timely manner so that problems are identified early and corrective action taken swiftly.

While the trend is improving, MDOT has not addressed underlying issues. The focus must remain on identifying those contracts with issues. The process improvement team is working to understand the systemic problems that prevent contracts that should have been closed in FY2016 from being closed.



PERFORMANCE MEASURE 2.8

Percent of Procurement on Time and on Budget

Chart 2.8.1: Percent of Blanket Purchase Orders (BPO) Expired FY2013-FY2016

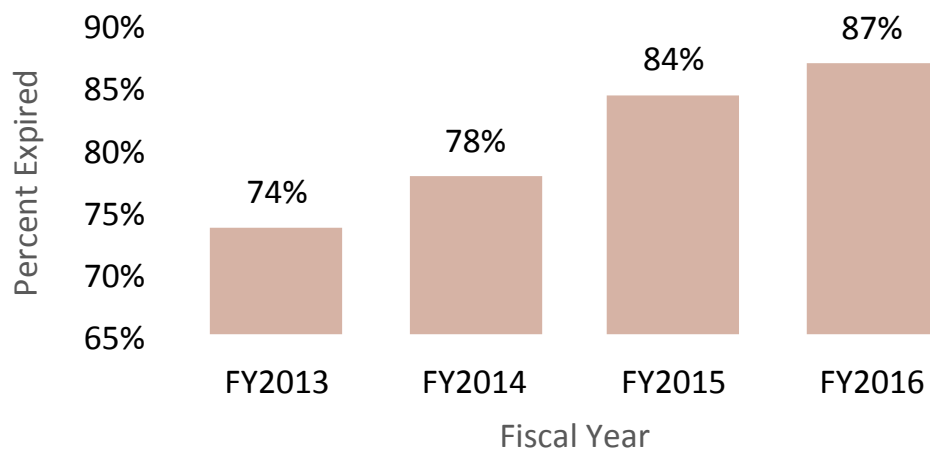
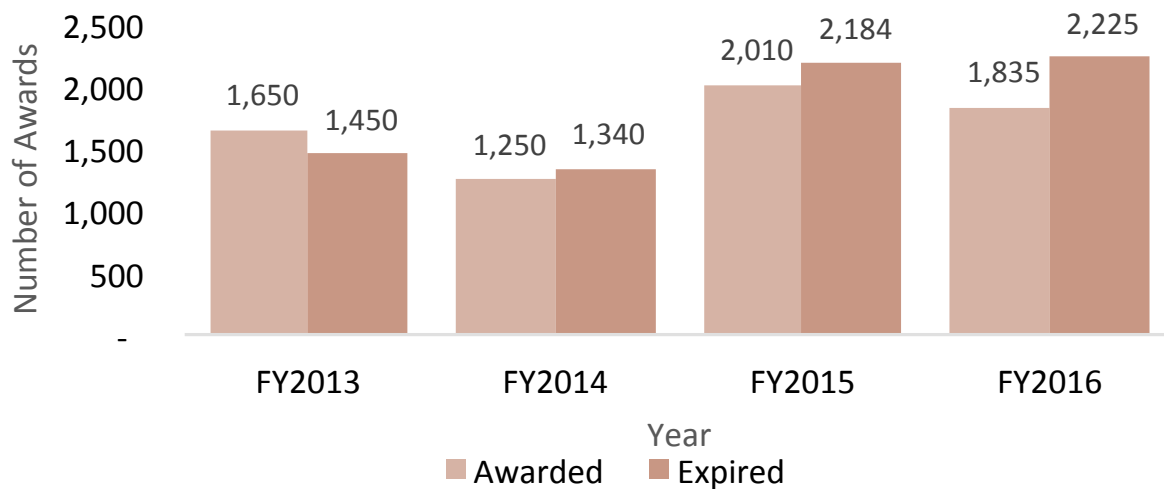


Chart 2.8.2: Number of Blanket Purchase Order (BPO) Awards and Expires FY2013-FY2016



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Pretam Harry

Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To measure the percent of occurrences and the dollar value of unanticipated contract modifications on procurement contracts.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

MDOT wide showing active unanticipated contract modifications equal to or greater than \$1 million.

NATIONAL BENCHMARK:

N/A

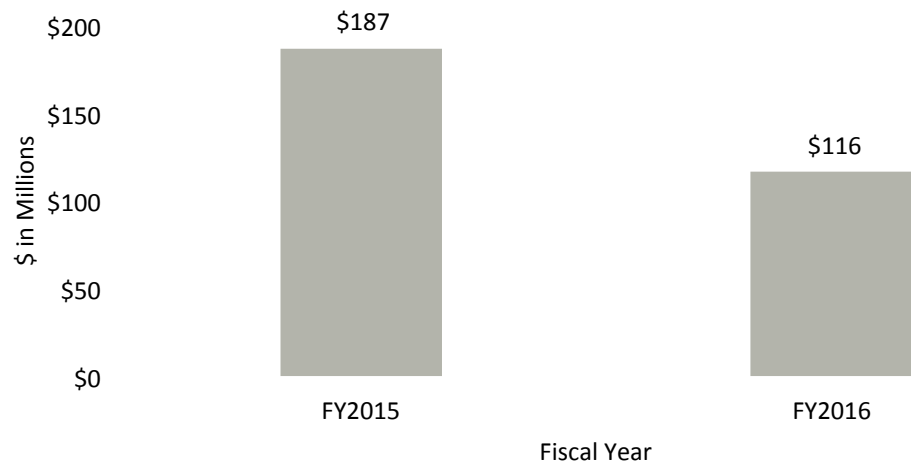
PERFORMANCE MEASURE 2.9

Percent and Value of Unanticipated Contract Modifications

The purpose of this measure is to encourage all managers to proactively monitor and manage each of their procurements to make sure that they are minimizing the value and amount of unanticipated contract modifications. In addition, it will encourage project staff to use timely and accurate reports that managers can analyze to examine trends in unanticipated contract modifications.

The amount and value of contract modifications will vary from one TBU to another depending on the type of project. For example, construction contracts, because of the uncertainties due to weather conditions or soil conditions, may require more contract modifications than building maintenance contracts. Similarly, an IT development contract may require more contract modifications than an IT maintenance contract.

**Chart 2.9.1: Value of Unanticipated Contract Modifications MDOT-wide
FY2015-2016**



PERFORMANCE MEASURE 2.9

Percent and Value of Unanticipated Contract Modifications

Chart 2.9.2: Percent of Unanticipated Contract Modification Dollars Spent by TBU FY2015-FY2016

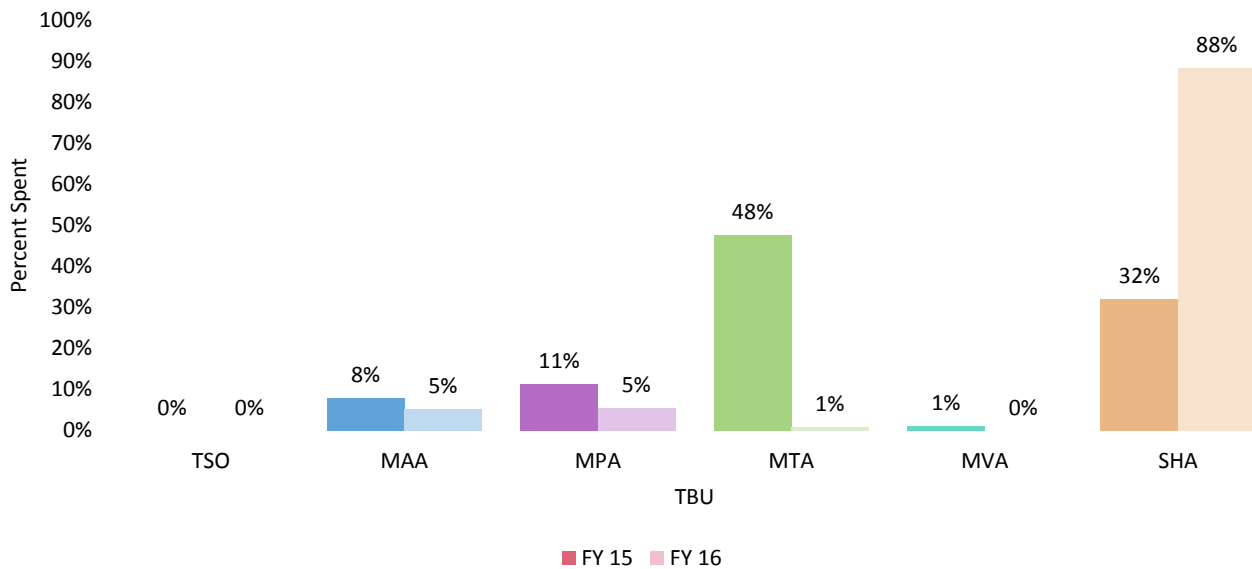
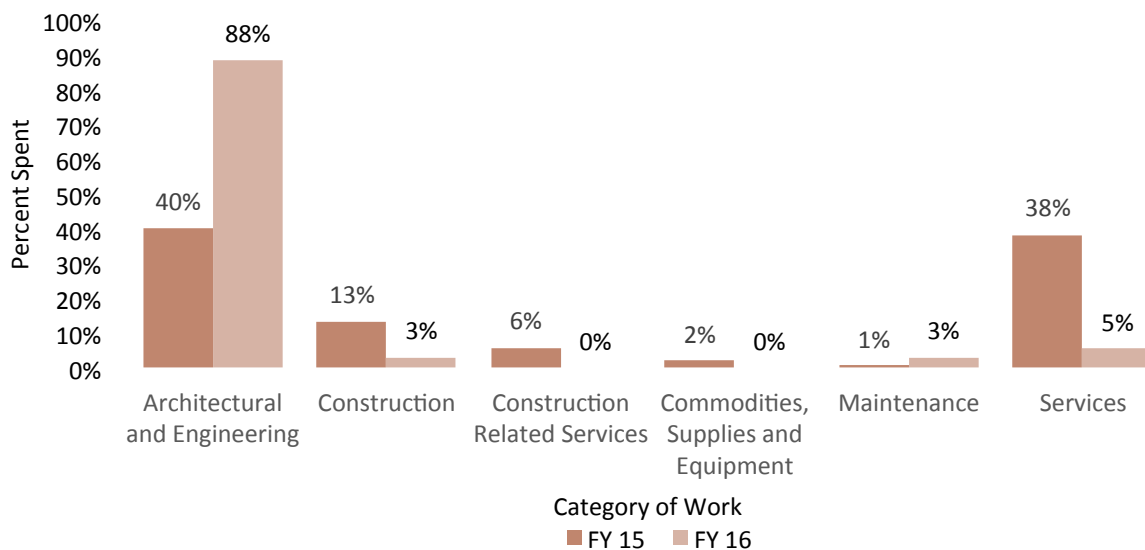


Chart 2.9.3: Percent of Unanticipated Contract Modification Dollars Spent by Category of Work in FY2015-FY2016



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Laura Getty

Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

Understand how procurement competition impacts MDOT resources.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data was collected on each TBU procurement contract over \$200,000 during the Q3 FY2017. Sole source, emergency, and intergovernmental purchasing procurements were not included, as they have their own processes for determination. Procurement contract ID, number of bids, estimated cost and final contract amount were the data points.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.10

Relationship Between Procurement Competition and Cost

Assessing the impact of procurement competitiveness on contract costs tests the hypothesis that increased competition leads to a better price. It also tests MDOT's ability to accurately estimate and plan for costs. The data trend presents an opportunity to develop an MDOT-wide initiative to track cost estimates on procurement contracts and to evaluate the process for determining estimates.

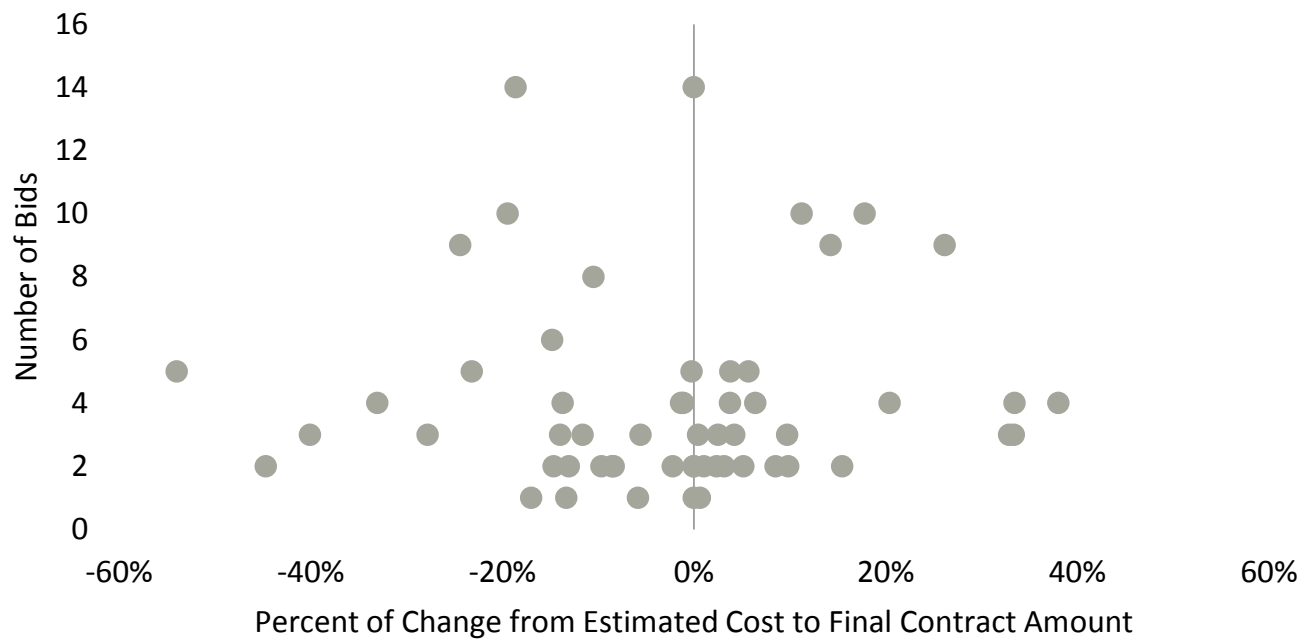
The data continues to suggest that, as the number of bids increases, procurement contracts come in at or below cost estimate. The procurements that increased in cost had a low number of bids. Eighteen percent of procurements this quarter were greater than 10 percent over their estimated cost, and 21 percent were greater than 15 percent under estimated cost. Procurements greater than 10 percent over and 15 percent under both had an average number of five bids.

With a year of data now, the process improvement team is examining outliers by TBU and type of contract. The sample size is too small to do reliable statistical analysis on types of contract.

PERFORMANCE MEASURE 2.10

Relationship Between Procurement Competition and Cost

Chart 2.10.1 Percent Change from Estimated Cost to Final Contract Amount MDOT-Wide Q3 FY2017



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Patrick Bradley
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To monitor compliance with State and organizational operating processes and procedures each year by tracking the number of Internal Audit Findings and Repeat Internal Audit Findings.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Information collected from TBU audit databases.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.11

Number of Internal Audit Findings and Number of Repeat Internal Audit Findings

Transparent, informative, and accurate financial reporting is essential for customers to have confidence in MDOT's ability to manage resources. Audits provide a window into current systems and areas for improvement.

Data will be presented by TBU in the number of audit findings and repeat audit findings on an annual basis. This will encourage MDOT and each TBU to avoid audit and repeat audit findings.

In FY 2013-2016, there were 627 total Internal Findings. The number of Repeat Internal Audit Findings totaled 32 in FY 2013 – FY2016, dealing with materials and supplies management (16 findings), fixed asset inventories (6 findings), promotional expense documentation and authorization (5 findings), MBE subcontractors reporting and compliance reviews (2 findings), and one finding each on the COMAR competitive bid process, overtime approvals not being documented and improper auto title lien documentation.

The materials and supplies management repeat audit findings include such items as segregation of duties, access to storeroom, non-signed receipts, perpetual inventory records not being accurate, documentation issues and inventory turning over less than three times per year.

Thirteen of thirty-two Repeat Internal Audit Findings have been resolved. Of the remaining unresolved nineteen Repeat Internal Audit Findings, thirteen are FY 2016 findings which are unresolved as the audit staff have not confirmed implementation of the changes. The remaining six items are three findings repeated in both FY 2013 and FY 2015 which are scheduled to be resolved in 2017.

PERFORMANCE MEASURE 2.11

Number of Internal Audit Findings and Number of Repeat Internal Audit Findings

Chart 2.11.1: Number of Internal Audit Findings FY2013-FY2016

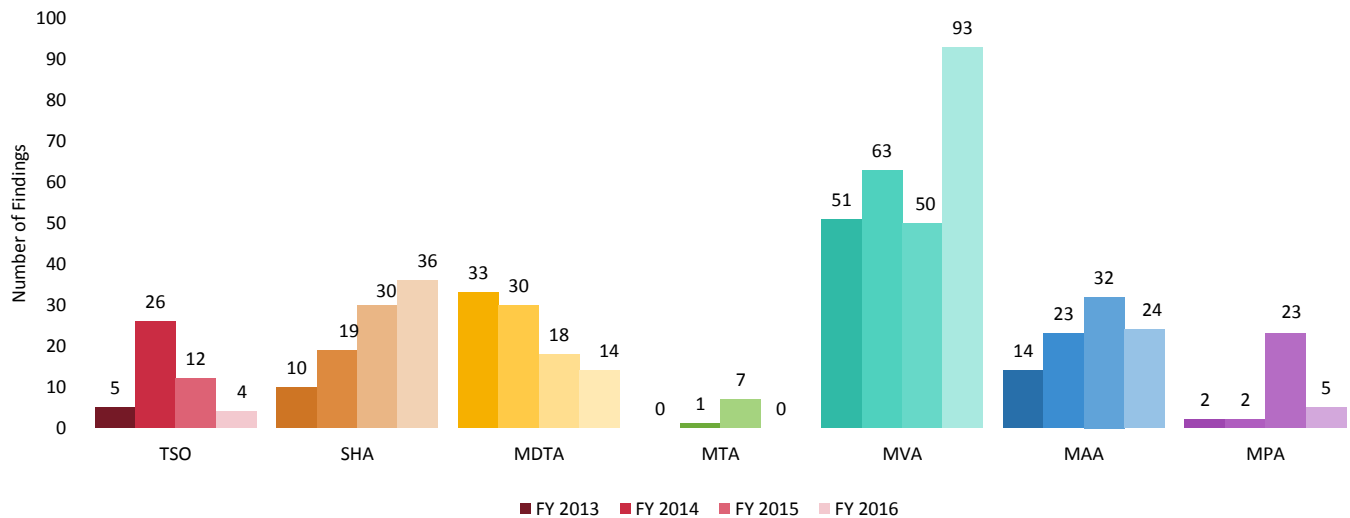
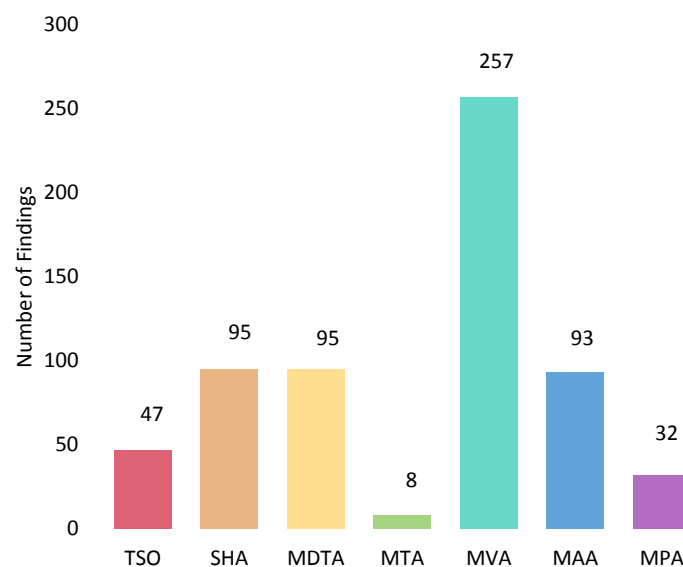


Chart 2.11.2: Number of Total Internal Audit Findings by TBU FY2013-FY2016



PERFORMANCE MEASURE 2.11

Number of Internal Audit Findings and Number of Repeat Internal Audit Findings

Chart 2.11.3: Total Internal Audit Findings FY 2013-FY 2016

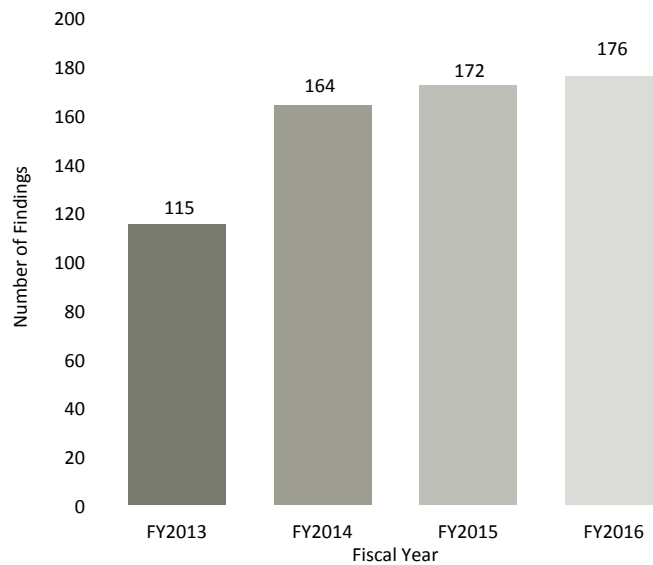
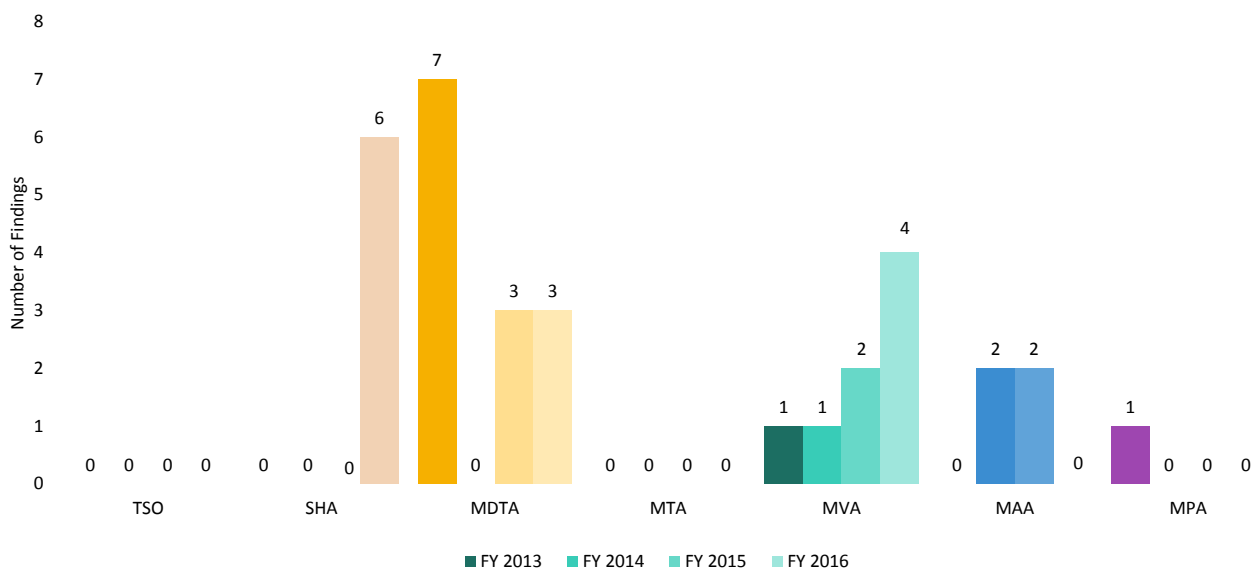


Chart 2.11.4: Number of Internal Audit Repeat Findings FY2013-FY2016



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Patrick Bradley

*Maryland Aviation Administration
(MAA)*

PURPOSE OF MEASURE:

To monitor compliance with State and organizational operating processes and procedures each year by tracking the number of Legislative Repeat Audit Findings.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Information collected from TBU audit databases.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.12**Number of Legislative Repeat Audit Findings**

Transparent, informative, and accurate financial reporting is essential for customers to have confidence in MDOT's ability to manage resources. Legislative audits provide an external view of our current systems and areas for improvement.

The purpose of this performance measure is to track the number of Legislative Repeat Audit Findings. Data will be presented MDOT-wide in the number of legislative repeat audit findings on an annual basis. This will encourage MDOT and each TBU to avoid Legislative Repeat Audit Findings.

In FY2013-FY2016 there were five total Office of Legislative Audit (OLA) Repeat Audit Findings dealing with proper internal controls over purchased items not being maintained, access to fare collection equipment and money rooms not being controlled, access controls to critical database security logs, files and transactions lacking, a lack of controls over critical virtual servers, and the process for determining the propriety of architectural and engineering contract billings not being comprehensive.

The five Legislative Repeat Audit Findings occurred in FY 2013 – FY 2015 and have been resolved. There were zero Legislative Repeat Audit Findings in FY 2016.

PERFORMANCE MEASURE 2.12

Number of Legislative Repeat Audit Findings

Chart 2.12.1 Number of Legislative Repeat Audit Findings FY2013-FY2016

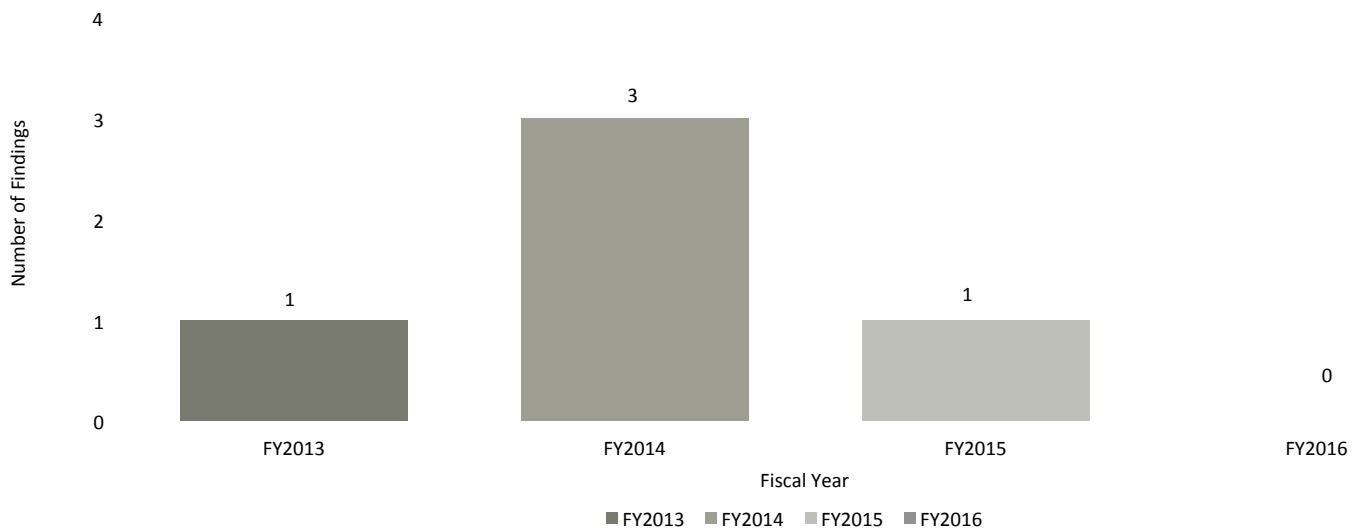
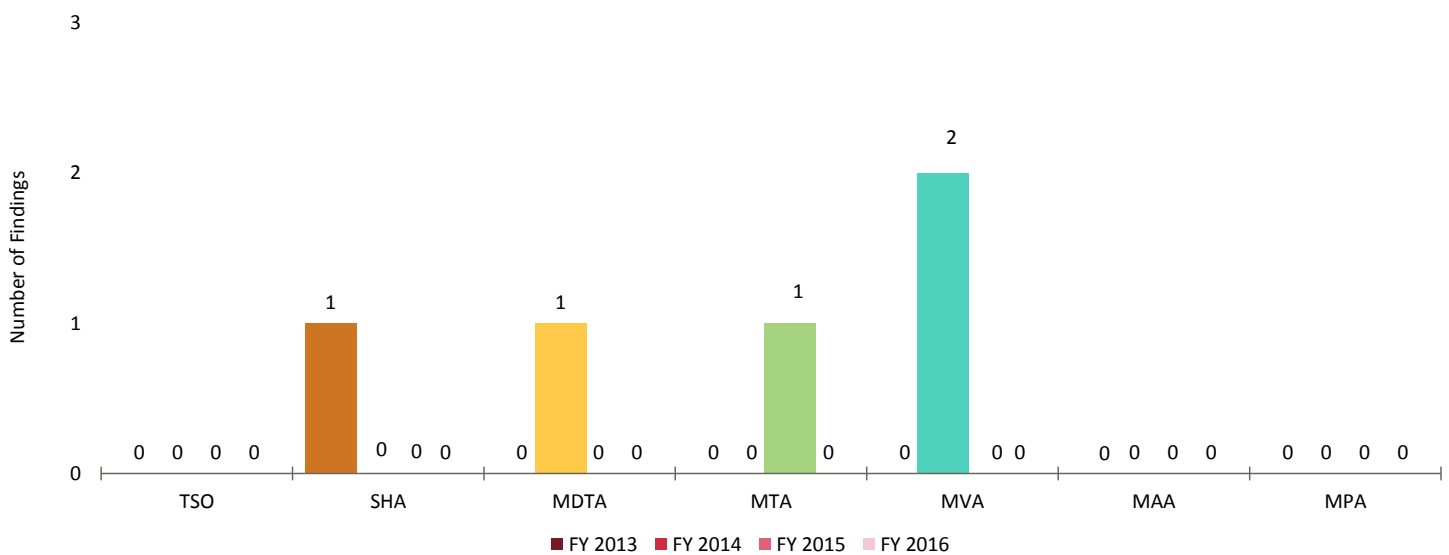


Chart: 2.12.2: Number of Legislative Audit Repeat Findings FY2013-FY2016



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Steven Watson

The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To track the number of fraud hotline complaints investigated by MDOT, as well as the time to respond and develop effective resolutions.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

The TBU Internal Audit Offices provide data compiled into a spreadsheet database tracking fraud hotline complaints by source and investigations still outstanding at the time of reporting.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.13

Response to Fraud Hotline Complaints, including Response Time and Effective Resolution

MDOT must be responsive to complaints from customers. This performance measure tracks the number, response time, and effective resolution of fraud hotline complaints received or referred to MDOT. During the first quarter of 2017, MDOT received 33 complaints, of which 18 were referred by OLA and 11 were received through the MVA hotline. Some elements of the data requested of the TBUs were not previously collected making this first collection effort more challenging. Strategically working with the TBUs, the completeness and consistency of the data collected is improving.

Generally, fraud hotline complaints are received by MDOT through two sources – direct contact, or referral by OLA. OLA maintains a widely publicized fraud hotline phone number and receives many complaints; some investigated by OLA, others are referred to the respective State agency to investigate. Direct contacts come via TBU hotlines, direct phone calls or letters.

PERFORMANCE MEASURE 2.13

Response to Fraud Hotline Complaints, including Response Time and Effective Resolution

Chart 2.13.1: Fraud Complaints Received by Source and TBU Q1 CY2017

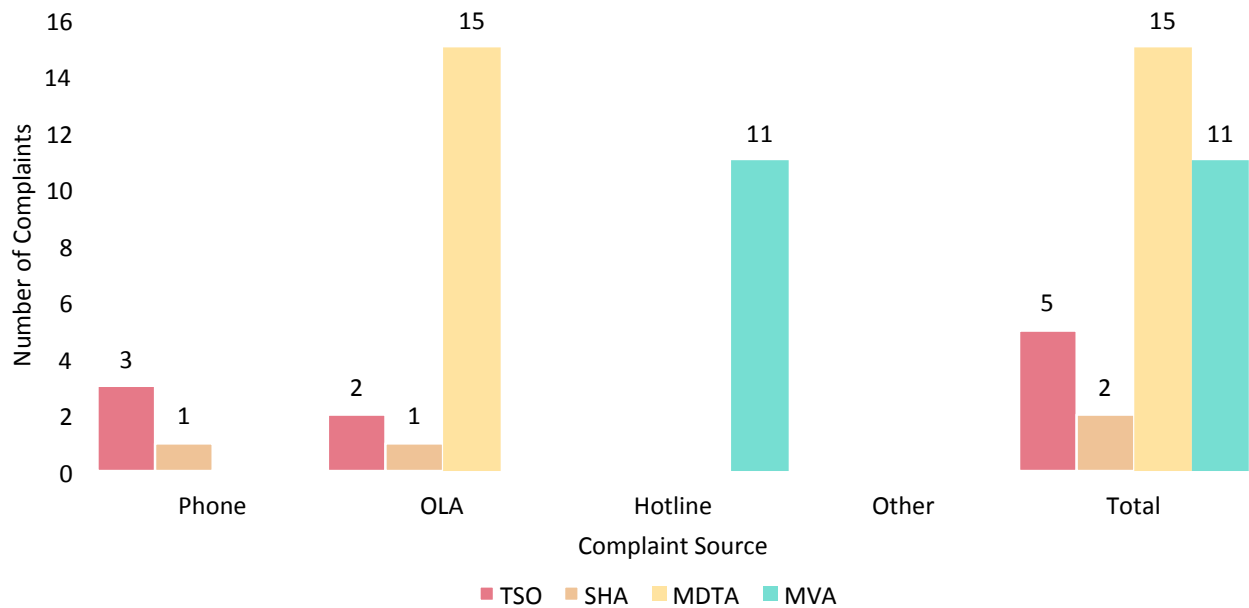
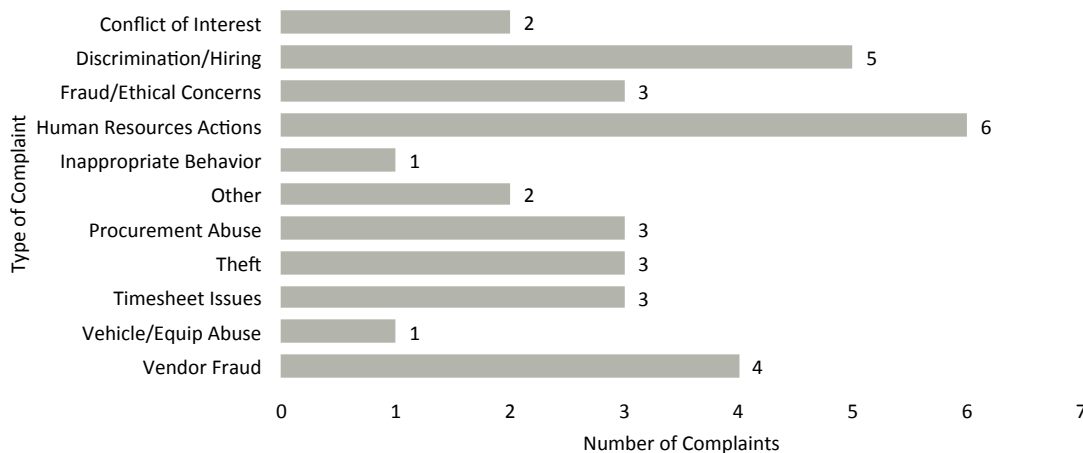


Chart 2.13.2: Fraud Complaints Received by Type Q1 CY2017



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

David Maier

The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To ensure that when MDOT acquires properties that it takes steps to maintain value of the remaining portions.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

A central MDOT database of properties will be tracked with attention to properties with buildings or other structures.

NATIONAL BENCHMARK:

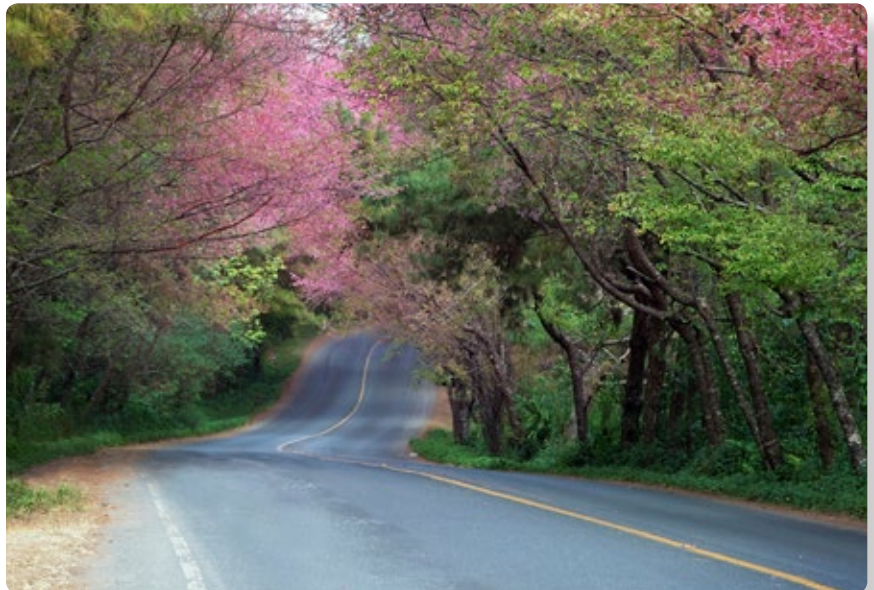
N/A

PERFORMANCE MEASURE 2.14

Rate of Return on Real Property

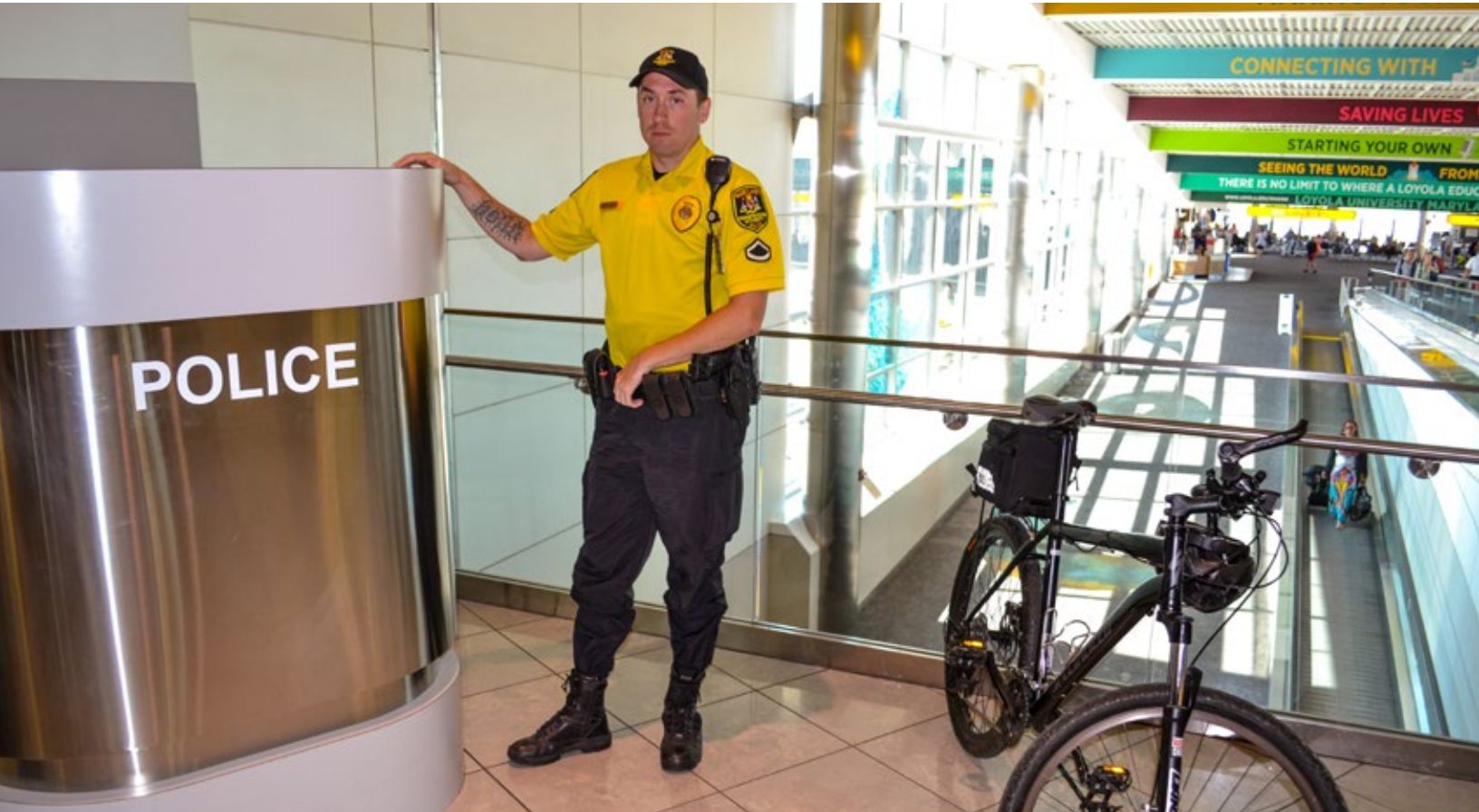
As MDOT acquires real property for a State transportation purpose, portions of those properties are deemed excess and can be sold. To maximize the return on investment, MDOT needs to ensure that when it acquires properties that it takes steps to maintain the value of the remaining unused portion.

A combined inventory and review of all MDOT properties is underway at TSO. Priority is being given to improved properties with buildings and other structures since these properties are most at risk if not maintained properly.



TANGIBLE RESULT #3

Provide a Safe and Secure Transportation Infrastructure



MDOT will not compromise on our commitment to continually improve the safety and security of our customers and partners in everything we do.

RESULT DRIVER:

Sarah Clifford

Maryland Transportation Authority (MDTA)

Provide a Safe and Secure Transportation Infrastructure

TANGIBLE RESULT DRIVER:

Sarah Clifford
Maryland Transportation Authority
(MDTA)

PERFORMANCE MEASURE DRIVER:

Bud Frank
The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To track crime trends and adjust strategies/staffing/ response to protect customers, employees, and State property.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

MTA Police and MDTA Police will report directly to Measure Driver. SHA and MVA will compile information and also report directly to Measure Driver. Measure Driver will report to Project Management Team.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 3.1

Number of Crimes Against Persons and Property Committed at MDOT Facilities

This measure includes all Part I offenses and select Part II offenses as defined in the FBI Uniform Crime Report (UCR). The UCR is a national standard used by law enforcement for the collection and comparison of crime data nationwide. Part I offenses include homicide, forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft and arson. Part II offenses include less serious offenses such as other assaults, vandalism, disorderly conduct, and other sex offenses.

The following charts show a comparison between Q1 2016 versus Q1 2017 for Part I and Part II crimes involving the MTA, MAA, and the remaining TBUs combined.

Law enforcement reviews this data on a weekly and bi-weekly basis for resource allocation and targeted enforcement activities. The data is also used to determine areas of security concern.



Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.1

Number of Crimes Against Persons and Property Committed at MDOT Facilities

Chart 3.1.1: Part I Crimes CY2017

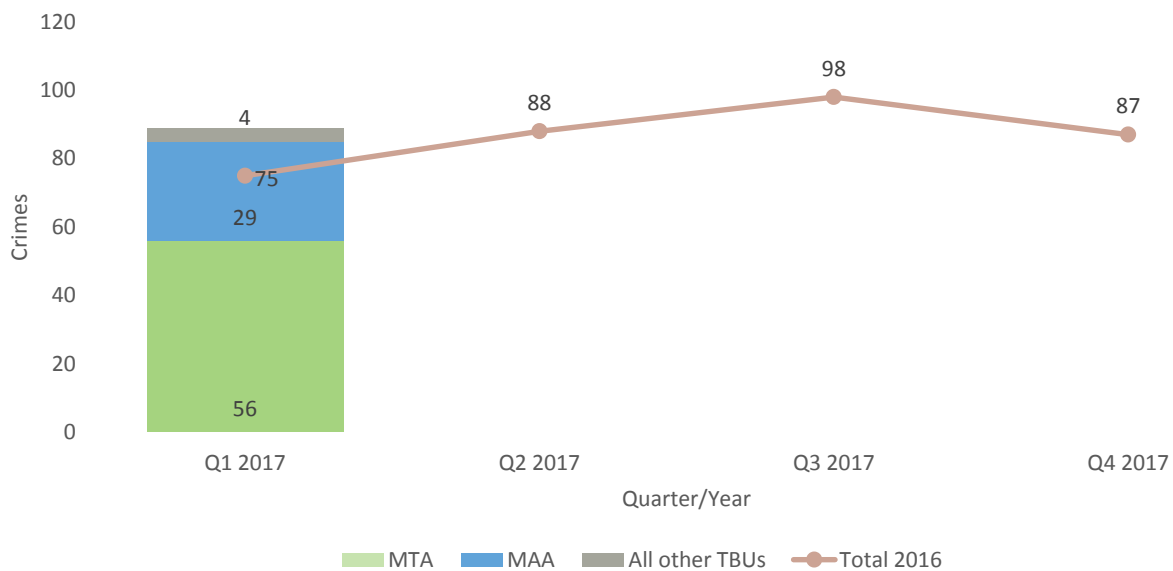
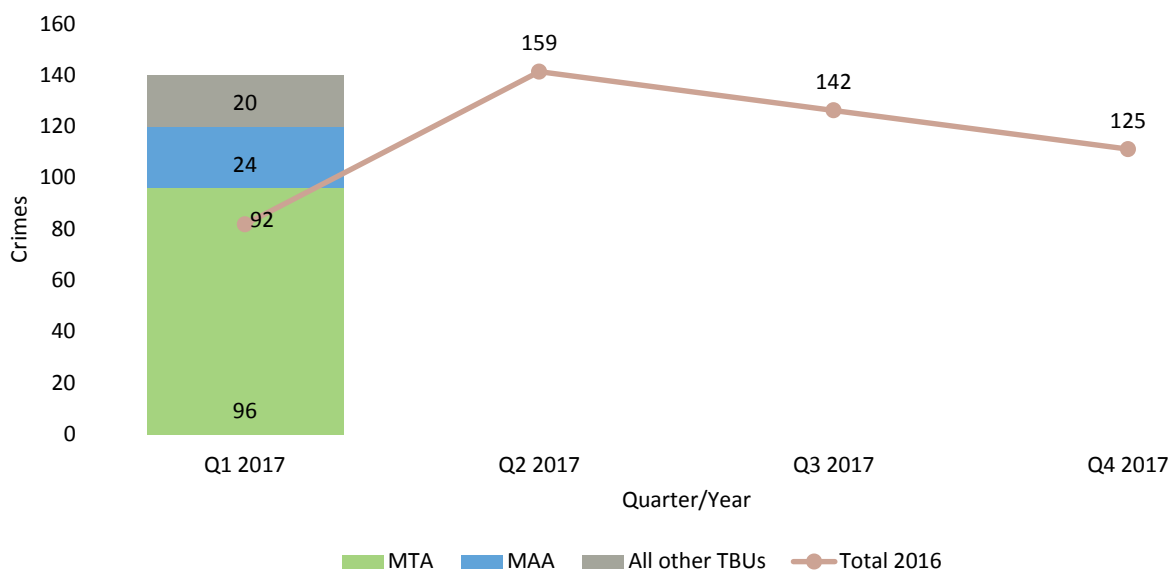


Chart 3.1.2: Part II Crimes CY2017



Provide a Safe and Secure Transportation Infrastructure

TANGIBLE RESULT DRIVER:

Sarah Clifford
Maryland Transportation Authority
(MDTA)

PERFORMANCE MEASURE DRIVER:

Thomas Gianni
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track quarterly and annual trends in the number of persons killed in motor vehicle crashes.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Based on Collected Police Data submitted to Maryland State Police (MSP) through Automated Crash Reporting System (ACRS).

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 3.2

Number of Traffic-Related Fatalities on All Roads

MDOT strives to implement programs that will increase driver safety by reducing traffic-related crashes that result in serious injuries and deaths. One key measure is tracking the number of fatalities on all roads and analyzing specific causes and related trends. Maryland's Strategic Highway Safety Plan (SHSP) is a comprehensive set of emphasis areas and strategies designed to reduce highway fatalities and serious injuries through the implementation of behavioral and engineering safety countermeasures. It is based on the Toward Zero Deaths approach to reduce fatalities 50 percent by 2030 from the 2008 baseline of 592 fatalities. The interim fatality reduction target for the most recent update of the SHSP is 394 in 2020.

Following a decade-long period of significant decreases in traffic-related fatalities, this trend unfortunately has begun to reverse. In 2014, the number of fatalities (443) was the lowest since 1948; but in 2015, the State experienced a 17.6 percent increase in highway fatalities (521), the largest single-year increase in 30 years. Although highway deaths remained steady in 2016 (522), these numbers are still far greater than those of previous years as well as established reduction targets.

These increased numbers of highway deaths over the past two years also have been experienced nationally as the total number of deaths on the nation's highways increased by 7.2 percent to 35,092 fatalities in 2015 and is projected to rise another 6 percent in 2016. The National Highway Traffic Safety Administration (NHTSA) attributes some of the cause of these fatality increases nationally to relatively inexpensive gasoline, a sharp increase in miles traveled and an improved economy.

Preliminary analysis of 2016 data in Maryland indicates Vehicle Miles Traveled (VMT) increased by nearly 2 percent an increase of more than one billion miles driven. For the 1st quarter of 2017 VMT increased at record rates. This increased exposure, coupled with risky driving behaviors and a failure to use seat belts, are believed to be significant reasons for the increase in highway fatalities in Maryland.



Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.2

Number of Traffic-Related Fatalities on All Roads

Bicyclists typically account for approximately 1 percent of all fatalities on Maryland's highways annually, or on average, about five or six bicycle fatalities every year. This average has escalated significantly in the past two years. There were 11 bicycle fatalities in 2015, and in 2016, 16 bicyclists lost their lives, comprising more than 3 percent of all traffic-related fatalities on Maryland highways. Additionally, in the 1st quarter of 2017 there have already been 4 bicycle fatalities, an increase of 3 from the 1st quarter of 2016.

Pedestrian deaths typically account for approximately 20 percent of all traffic-related fatalities and consistently measure approximately 100 per year. In 2016, 111 pedestrians lost their lives in traffic-related crashes and in Q1 2017 of 2017 there have been as many pedestrian deaths as during the same period in 2016.

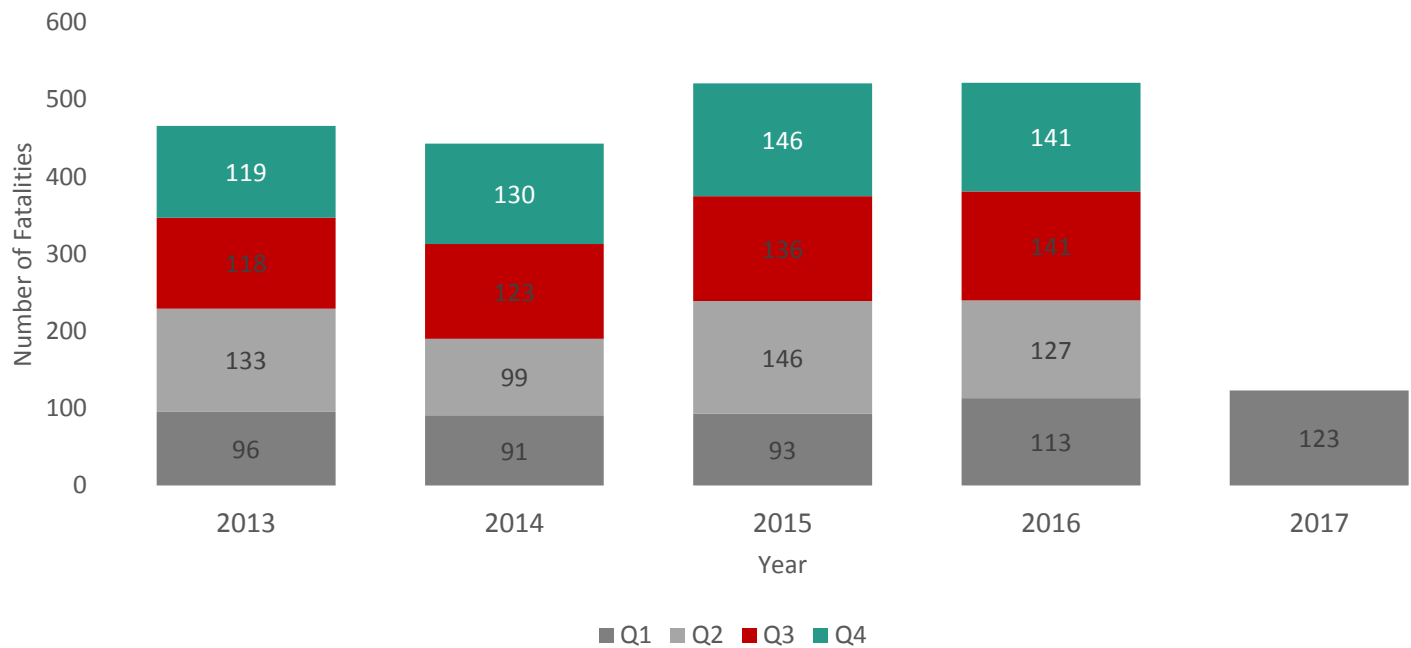
Maryland's SHSP is a five year plan (2016-2020) that establishes six specific emphasis areas along with long-term goals and mid-range reduction targets. The plan was developed by a diverse group of partners and stakeholders from across the state representing all 4-Es of highway safety (Engineering, Enforcement, Education and Emergency Medical Services). The emphasis areas (Aggressive Driving, Distracted Driving, Impaired Driving, Occupant Protection, Highway Infrastructure Safety, and Pedestrian & Bicycle Safety) involve a broad range of safety officials and stakeholders who design action plans for implementing the SHSP's strategies. These teams meet regularly to gauge progress and determine what changes need to be made to better implement the safety strategies. The SHSP is managed by an Executive Council that comprises the highest ranking officials responsible for public and highway safety. This group meets semi-annually to review overall progress and to discuss possible amendments to the plan made necessary by changing dynamics. The SHSP is administered by MDOT's Maryland Highway Safety Office.

Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.2

Number of Traffic-Related Fatalities on All Roads

Chart 3.2.1: Annual Comparison of All Traffic-Related Fatalities CY2013-CY2017

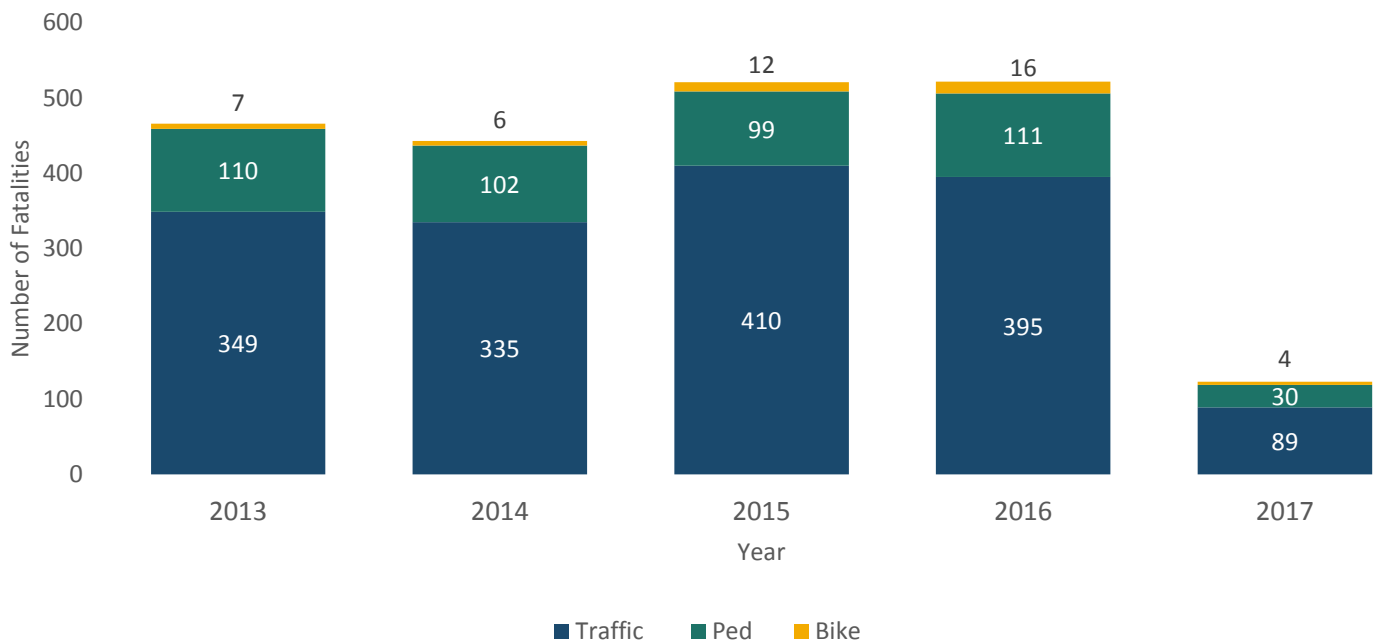


Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.2

Number of Traffic-Related Fatalities on All Roads

Chart 3.2.2: Annual Comparison of All Traffic-Related Fatalities CY2013-CY2017 (Q1)

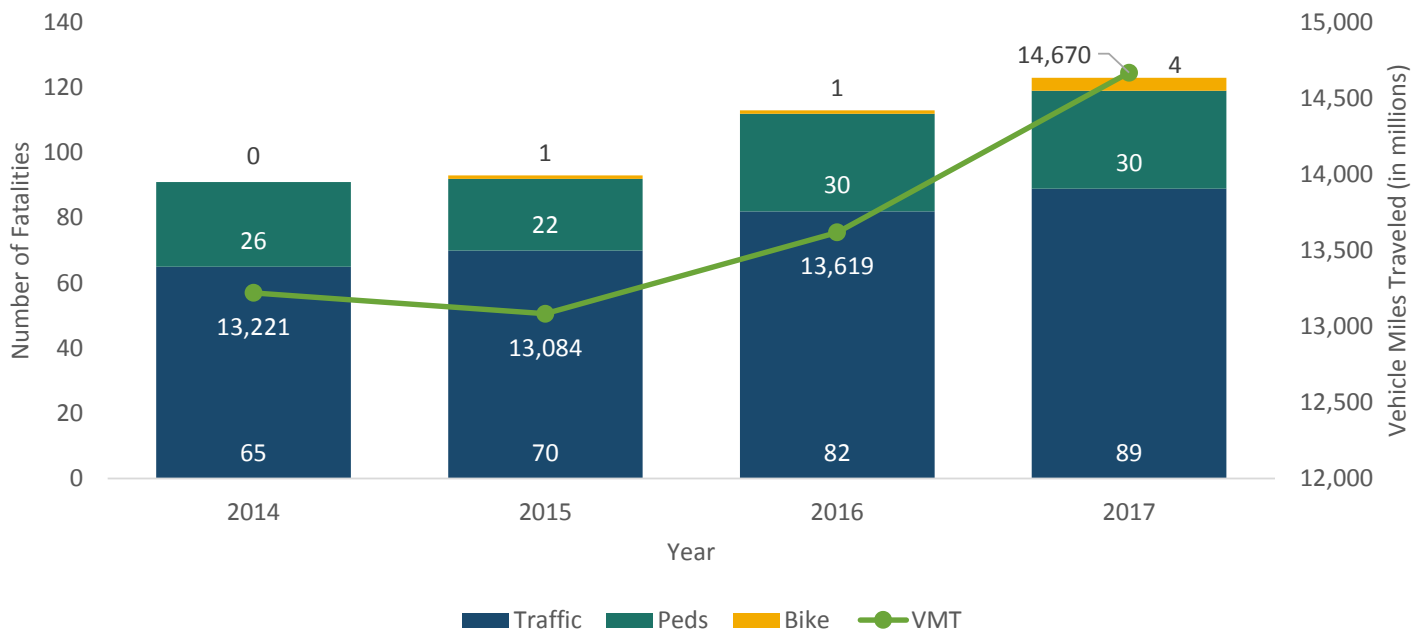


Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.2

Number of Traffic-Related Fatalities on All Roads

PM 3.2.3: Q1 Comparison of Traffic-Related Fatalities CY2014-CY2017



Provide a Safe and Secure Transportation Infrastructure

TANGIBLE RESULT DRIVER:

Sarah Clifford
Maryland Transportation Authority
(MDTA)

PERFORMANCE MEASURE DRIVER:

Thomas Gianni
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track trends in the number of persons killed in motor vehicle crashes per vehicle miles traveled (VMT).

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Travel (VMT) data based on highway counts on roadways across the state. Fatality data is collected by the MSP through its ACRS. The Maryland Highway Safety Office (MHSO) collects the data from these two agencies.

NATIONAL BENCHMARK:

National Highway Fatality Rate of 1.12 in 2015.

PERFORMANCE MEASURE 3.3

Maryland Traffic-Related Fatality Rate (Highways)

The fatality rate is a measure of the number of persons killed in a traffic-related crash for every 100 million Vehicle Miles Traveled (VMT) on all roads in the State. Through the use of automated highway counters, the VMT is determined monthly by SHA and is compared annually to the number of traffic-related fatalities to determine the rate.

Maryland's traffic-fatality rate compares favorably to the national fatality rate. While the U.S. fatality rate never has dipped below one death per 100 million VMT, Maryland's rate has remained below one for the past seven years. Although this rate had been trending downward, it increased in 2015 to .91 fatalities per 100 million VMT.

This increase corresponds with the significant increase in traffic-related fatalities in Maryland in 2015. Preliminary analysis of 2016 data in Maryland indicates VMT increased by nearly 2 percent, an increase of more than one billion miles driven. Despite these increases, Maryland's 2015 rate remained below the national rate of 1.12.

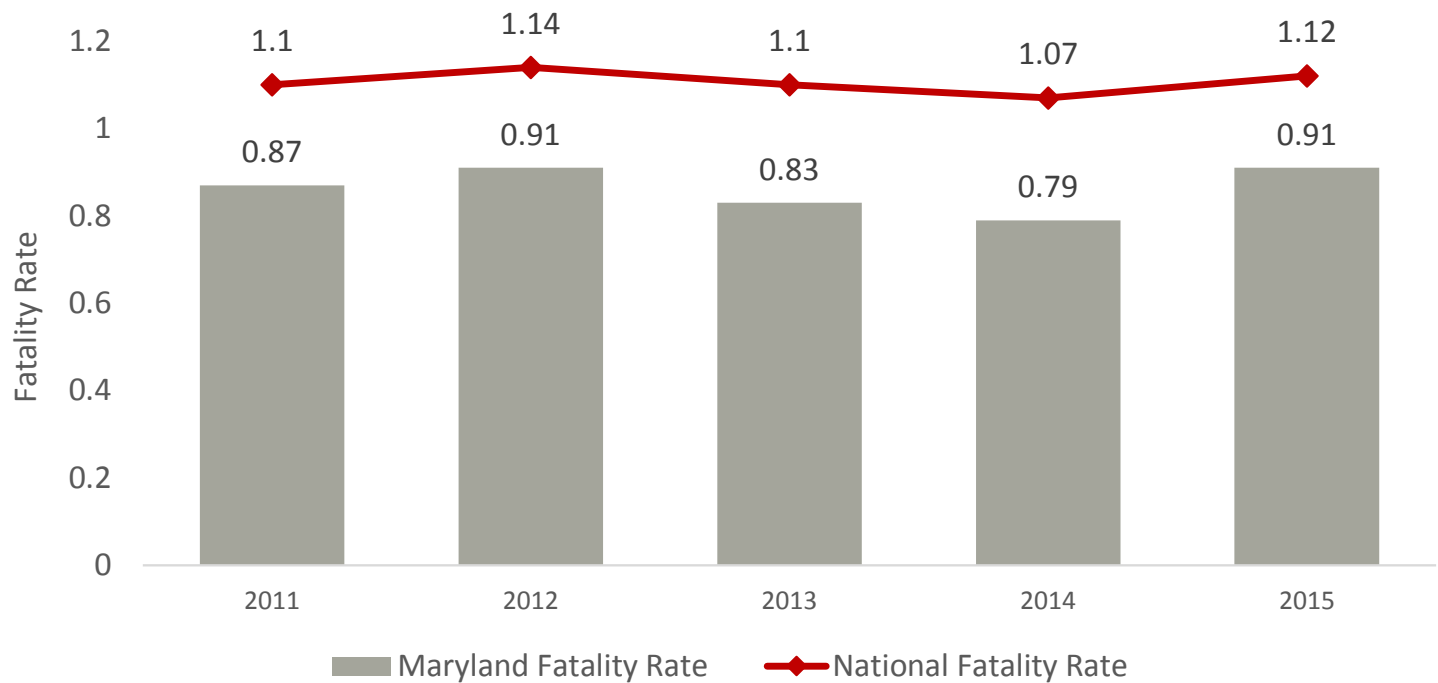
Historically, as the nation's and/or state's economy grows, people tend to drive more, increasing both the state's VMT and a person's risk for being in a crash. Opportunities to lower the fatality rate are best achieved by decreasing the number of traffic-related fatalities, as VMT is more difficult to influence.

Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.3

Maryland Traffic-Related Fatality Rate (Highways)

Chart 3.3.1: Traffic Related Fatality Rate Maryland vs. National Benchmark CY2011-CY2015



Provide a Safe and Secure Transportation Infrastructure

TANGIBLE RESULT DRIVER:

Sarah Clifford
Maryland Transportation Authority
(MDTA)

PERFORMANCE MEASURE DRIVER:

Thomas Gianni
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track quarterly and annual trends in the number of persons seriously injured in motor vehicle crashes.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Based on collected police data submitted to MSP through ACRS.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 3.4

Number of Traffic-Related Serious Injuries on all Roads

The number of traffic-related serious injuries is a count of persons sustaining an incapacitating injury in a crash. It is determined by a responding police officer investigating the crash and gathered from the injury severity code entered on the crash report. Maryland's SHSP is based on the "Toward Zero Deaths" approach: to reduce fatalities and serious injuries from traffic-related crashes by 50 percent by 2030 from the 2008 baseline. Serious Injury Goals have been set with a similar methodology. Interim Goals include 2015: 3,945; and 2020: 2,939. Strategies for reducing the crashes that cause both fatal and serious injuries are contained within the six main emphasis areas of the SHSP.

Over the past 10 years there has been a significant decrease in traffic-related serious injuries, including a 42 percent decline during a seven year period from 2008 to 2015. In 2016 however this reduction trend was reversed with a 16% increase of 422 more reported traffic-related serious injuries. This increase aligns with a similar increase in highway fatalities and a significant increase in Vehicle Miles Traveled (VMT) across the State.

Since fatality data is only a small portion of the entire crash picture in Maryland, serious injuries, and their frequency, help to provide more robust data in determining crash trends across the State. Additionally, striving to minimize crashes that result in serious injuries serves to reduce a motorist's risk for suffering their accompanying life-altering consequences.

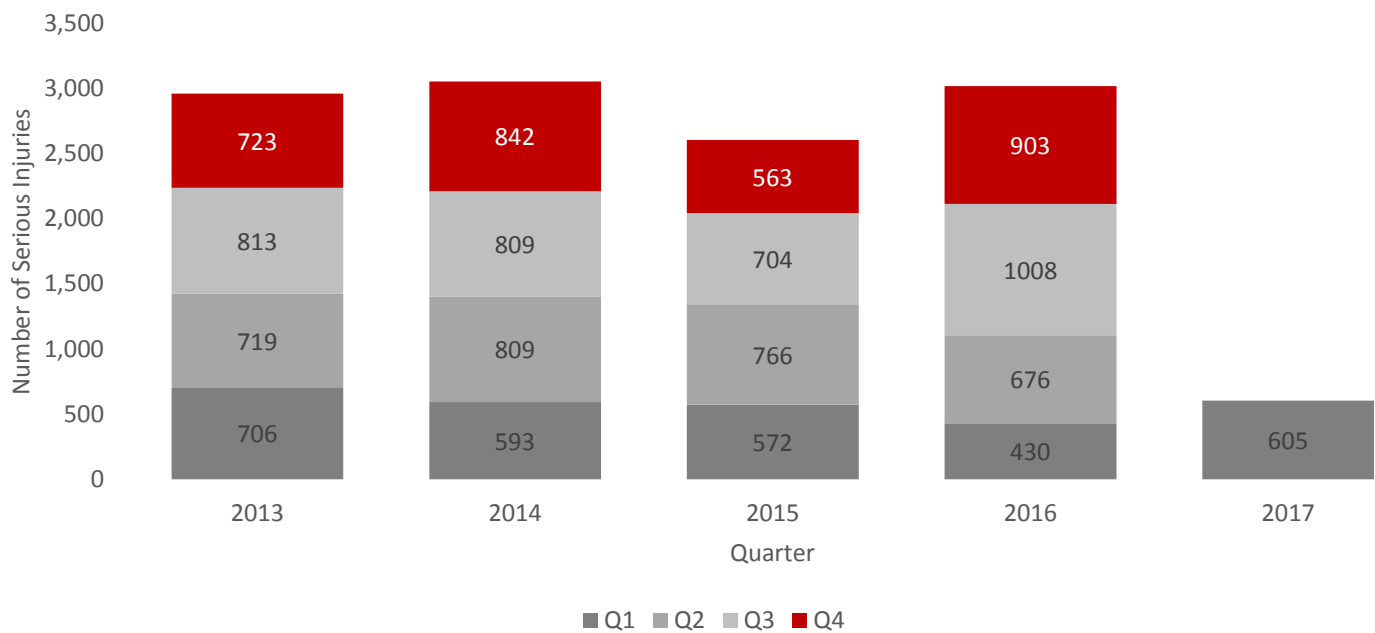
Since serious injuries are defined differently from state-to-state there is no national or common benchmark.

Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.4

Number of Traffic-Related Serious Injuries on all Roads

Chart 3.4.1: Annual Comparison of All Traffic-Related Serious Injuries CY2013-CY2017

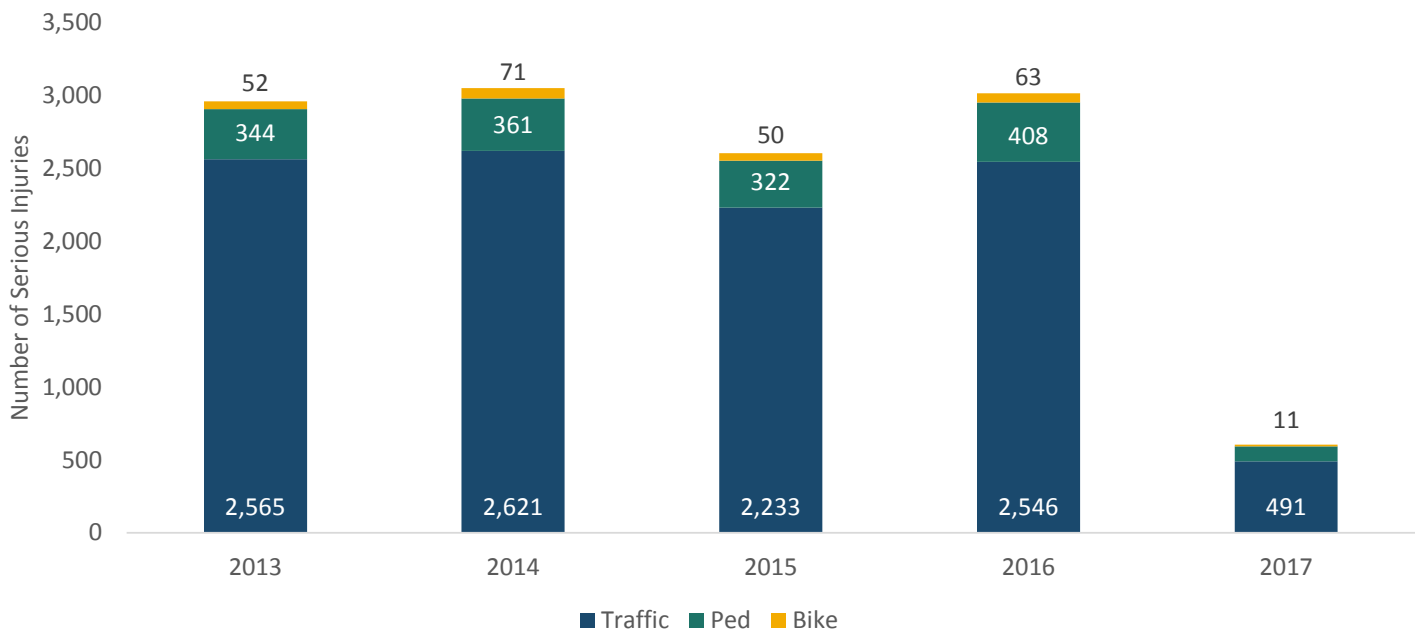


Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.4

Number of Traffic-Related Serious Injuries on all Roads

Chart 3.4.2: Annual Comparison of All Traffic-Related Serious Injuries CY2013-CY2017 (Q1)

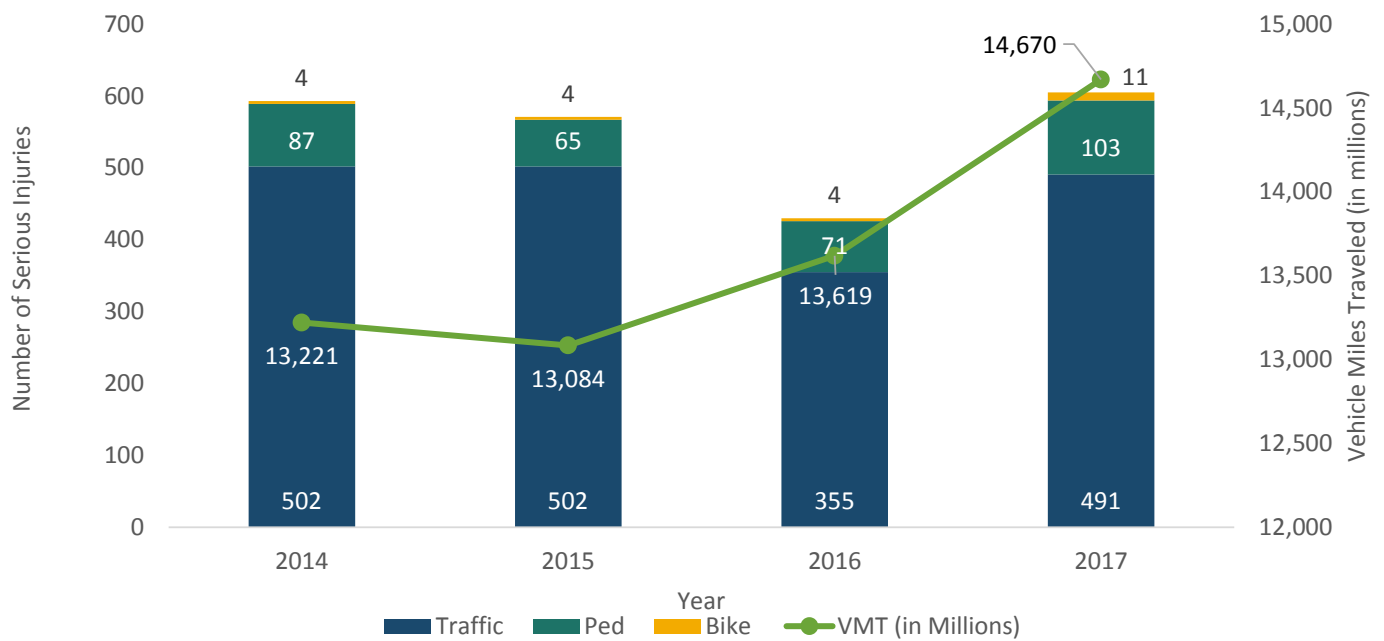


Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.4

Number of Traffic-Related Serious Injuries on all Roads

Chart 3.4.3: Q1 Comparison of Traffic-Related Serious Injuries CY2014-CY2017



Provide a Safe and Secure Transportation Infrastructure

TANGIBLE RESULT DRIVER:

Sarah Clifford
Maryland Transportation Authority
(MDTA)

PERFORMANCE MEASURE DRIVER:

Thomas Gianni
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track trends in the number of persons seriously injured in motor vehicle crashes per VMT.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

SHA collects VMT data based on highway counts on roadways across the state. The serious injury data is collected by the MSP through its ACRS. The MHSO collects the data from these two agencies. The rate is based on persons seriously injured in crashes per 100 million VMT.

NATIONAL BENCHMARK:

N/A

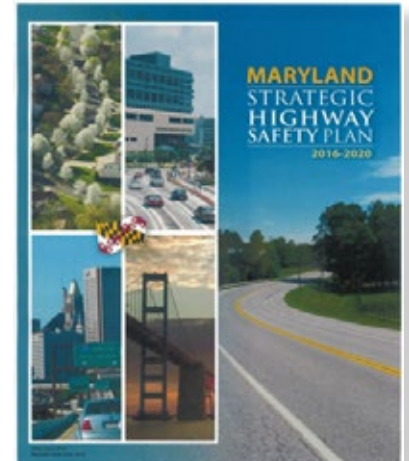
PERFORMANCE MEASURE 3.5

Maryland Traffic-Related Serious Injury Rate (Highways)

Maryland's serious injury rate is based on a measure similar to the fatality rate (number of persons seriously injured in a traffic-related crash per 100 million VMT). Over the past eight years, both the number of serious injuries and the corresponding rate have dropped dramatically by more than 33 percent. The SHSP is based on the Toward Zero Deaths approach, and serious injury rate targets have been set using a similar methodology.

The SHSP contains strategies intended to reduce risky driving behaviors that result in the types of crashes leading to death or serious injury. By addressing and ultimately eliminating these severe crashes, all motorists can enjoy traveling Maryland's roadways without the fear of being killed or seriously injured. Death or serious injury is not an acceptable consequence of driving.

As engineering advances have resulted in safer vehicles and highways, and as emergency medical services continue to provide immediate critical care, the numbers of traffic-related serious injuries (and their corresponding rates) have declined significantly in the last several years. Even in 2015, when traffic-related fatalities increased significantly, the number of traffic-related serious injuries and its corresponding rate continued to decline.

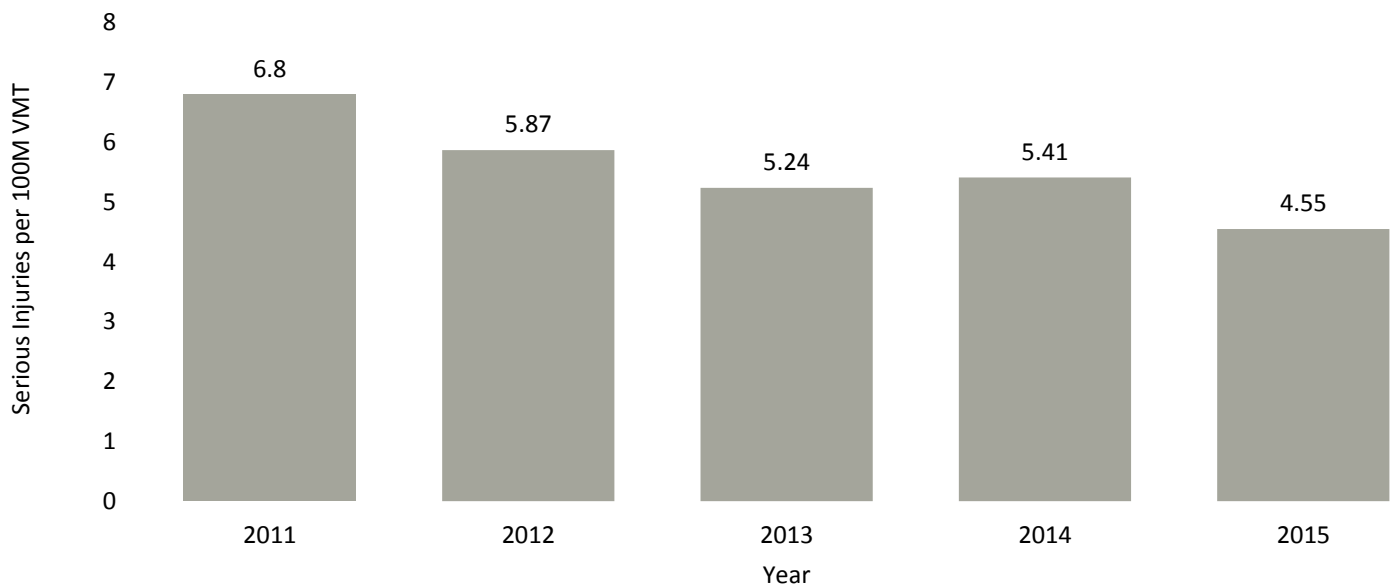


Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.5

Maryland Traffic-Related Serious Injury Rate (Highways)

Chart 3.5.1: Maryland Traffic Related Serious Injury Rate CY2011-CY2015



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TANGIBLE RESULT DRIVER:

Sarah Clifford
Maryland Transportation Authority
(MDTA)

PERFORMANCE MEASURE DRIVER:

Gina Watson
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To track trends in seat belt use in Maryland and assess how Maryland ranks against the national rate as an indicator of how well seatbelt use is encouraged.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Observational Survey conducted by MHSO.

NATIONAL BENCHMARK:

Nationwide usage rate provided by NHTSA reached 90.1 percent in 2016.

PERFORMANCE MEASURE 3.6

Maryland Seat Belt Usage Rate

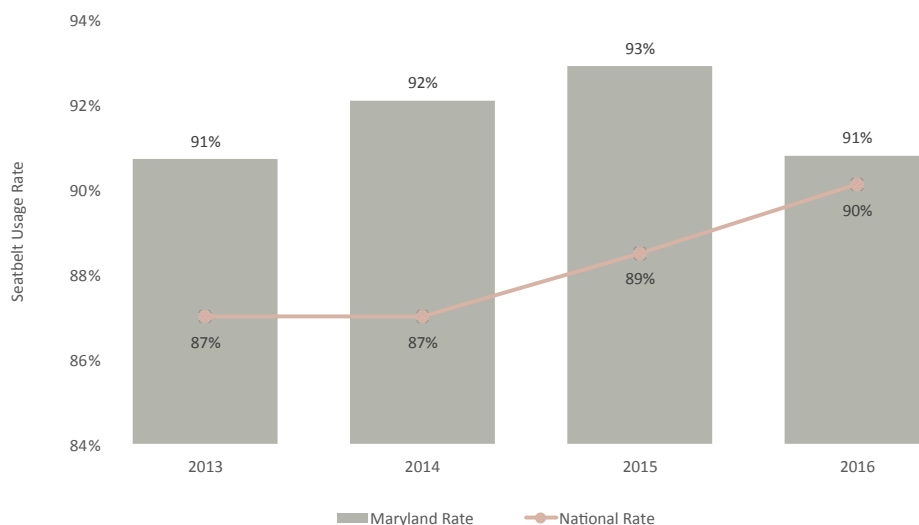
The use of seat belts by Maryland drivers greatly reduces the severity of personal injury and occupant fatalities in crashes. States such as Maryland with primary and secondary seat belt enforcement laws exhibit higher seat belt usage rates.

Maryland's seat belt usage rate is collected by an observational survey methodology approved by the NHTSA. The MHSO goal for seat belt usage for 2017 is 94.1 percent.

Maryland will continue to be a strong supporter of the Click-it or Ticket campaign with incorporation of dynamic public awareness programs. In addition, law enforcement agencies will continue to be educated on the importance of seat belt enforcement.



Chart 3.6.1: Maryland Seatbelt Usage Rate vs. National Benchmark Rate CY2013-CY2016



Provide a Safe and Secure Transportation Infrastructure

TANGIBLE RESULT DRIVER:

Sarah Clifford
Maryland Transportation Authority
(MDTA)

PERFORMANCE MEASURE DRIVER:

Cedric Ward
State Highway Administration (SHA)

PURPOSE OF MEASURE:

To track and assess the performance of MDOT's incident management programs to respond to customer needs while traveling.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data is collected from centralized reporting to CHART for roadway data. MPA and MAA data are collected individually.

NATIONAL BENCHMARK:

N/A

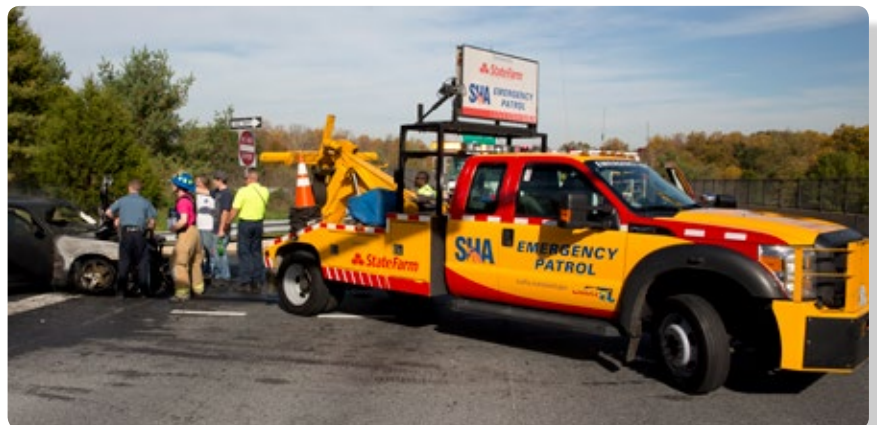
PERFORMANCE MEASURE 3.7

Disabled Motorists Assisted by MDOT

The Coordinated Highways Action Response Team (CHART) is a joint effort of MDOT, the Maryland State Police, and numerous other Federal, state and local agencies. CHART provides assistance to disabled motorists and responds to traffic incidents throughout Maryland. In the Baltimore and Washington metropolitan areas, patrols are operated 24 hours per day, seven days per week. In addition to services on highways, the MPA and MAA provide assistance to their customers who experience vehicle issues. These services provide an added value to MDOT customers who might otherwise need to rely on paid service providers. Customers can access this service by dialing *77 or through the normal 911 emergency dispatch.

For the 2017 calendar year, MDOT has helped 17,995 disabled motorists. Additionally, CHART provides real-time traffic conditions through its website: <http://www.chart.state.md.us/>.

Efforts are underway to advertise and award the next phase of Closed Circuit Television Cameras (CCTV) and Dynamic Message Boards (DMS) to further assist with traffic monitoring, incident detection, and providing motorists with information to avoid delays and congestion.

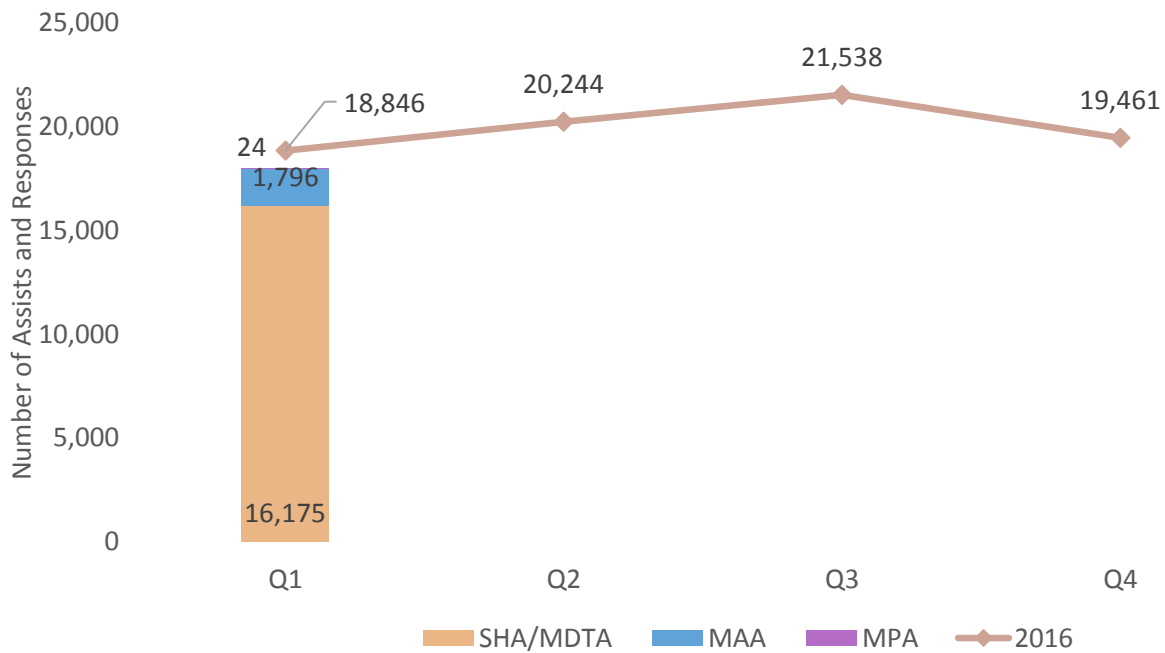


Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.7

Disabled Motorists Assisted by MDOT

Chart 3.7.1: Number of Assists and Responses CY2017

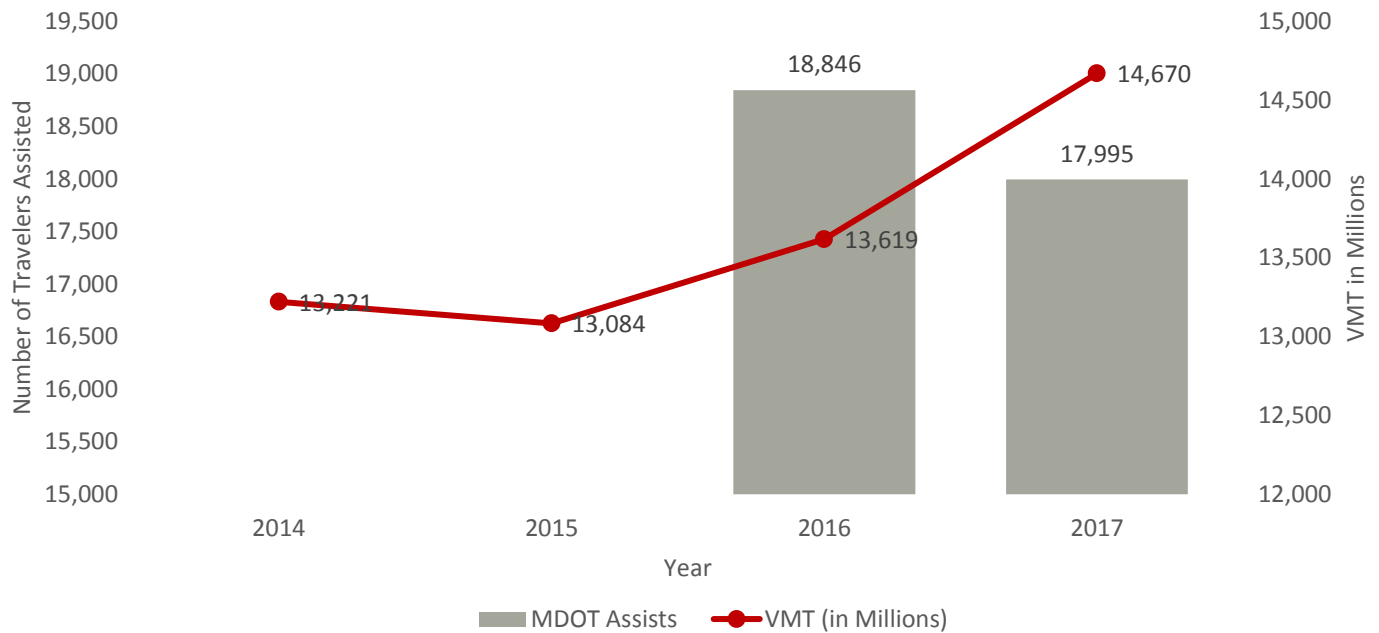


Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.7

Disabled Motorists Assisted by MDOT

Chart 3.7.2: MDOT Travelers Assisted Compared to VMT Q1 CY2014-CY2017



Provide a Safe and Secure Transportation Infrastructure

TANGIBLE RESULT DRIVER:

Sarah Clifford
Maryland Transportation Authority
(MDTA)

PERFORMANCE MEASURE DRIVER:

Cedric Johnson
Maryland Aviation Administration
(MAA)

PURPOSE OF MEASURE:

To track injury reporting trends at MDOT TBUs.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Collected by Injured Workers Insurance Fund (Chesapeake Employers' Insurance is for private companies) and sent to agencies as a report.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 3.8

Number of Employee Injuries Reported (First Report of Injury)

This measure is used for analysis and the development and implementation of risk mitigation strategies. This is the starting point data source for maintaining a safe work environment.

This measure includes all First Reports of Injury (FROI) to the Injured Workers Insurance Fund (Chesapeake Employers' Insurance is for private companies). This is a 3rd quarter comparison of FY 2016 versus FY 2017. Data indicates a decrease during FY 2017 in the number of employee injuries reported.

Strategies for reducing employee injuries: Creation of MDOT TBU Process Improvement Team, formulate MDOT-wide recommendations on processes/ practices to improve documenting and coding work injury leave; create a list of risk mitigation strategies based on types of injuries; identify strategies for mitigating potential work injury leave abuse; and create strategy to capture value of lost work days. TBU Risk Managers meet quarterly to review data, evaluate progress, and develop strategies for emerging risks.



Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.8

Number of Employee Injuries Reported (First Report of Injury)

Chart 3.8.1: Number of Injuries (FROI) Reported - 3rd Quarter

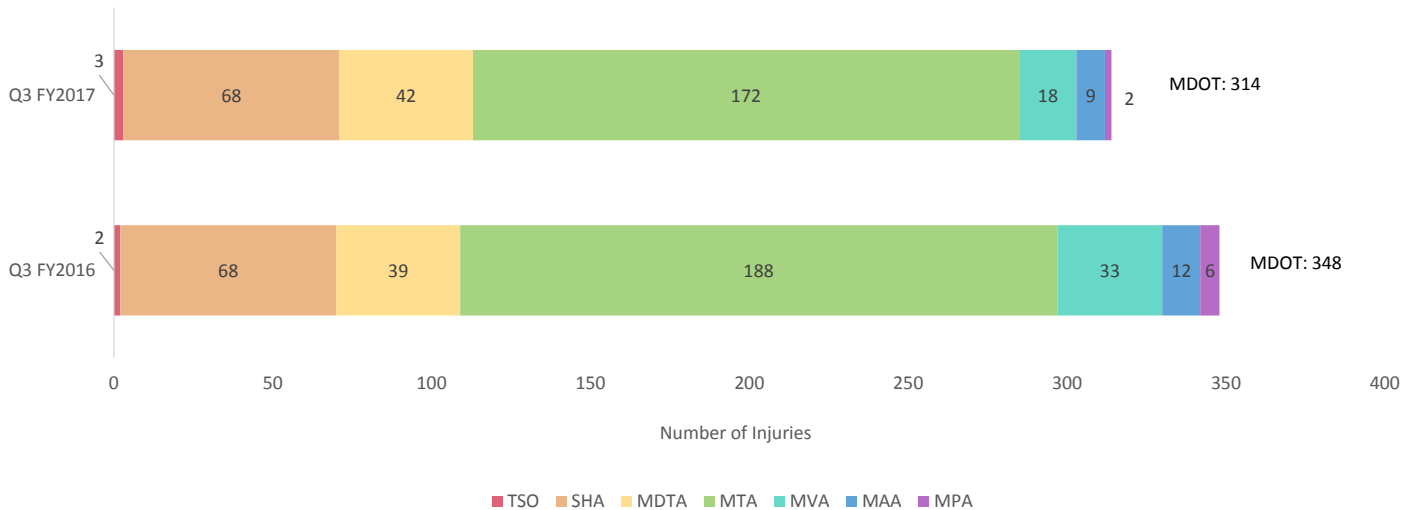
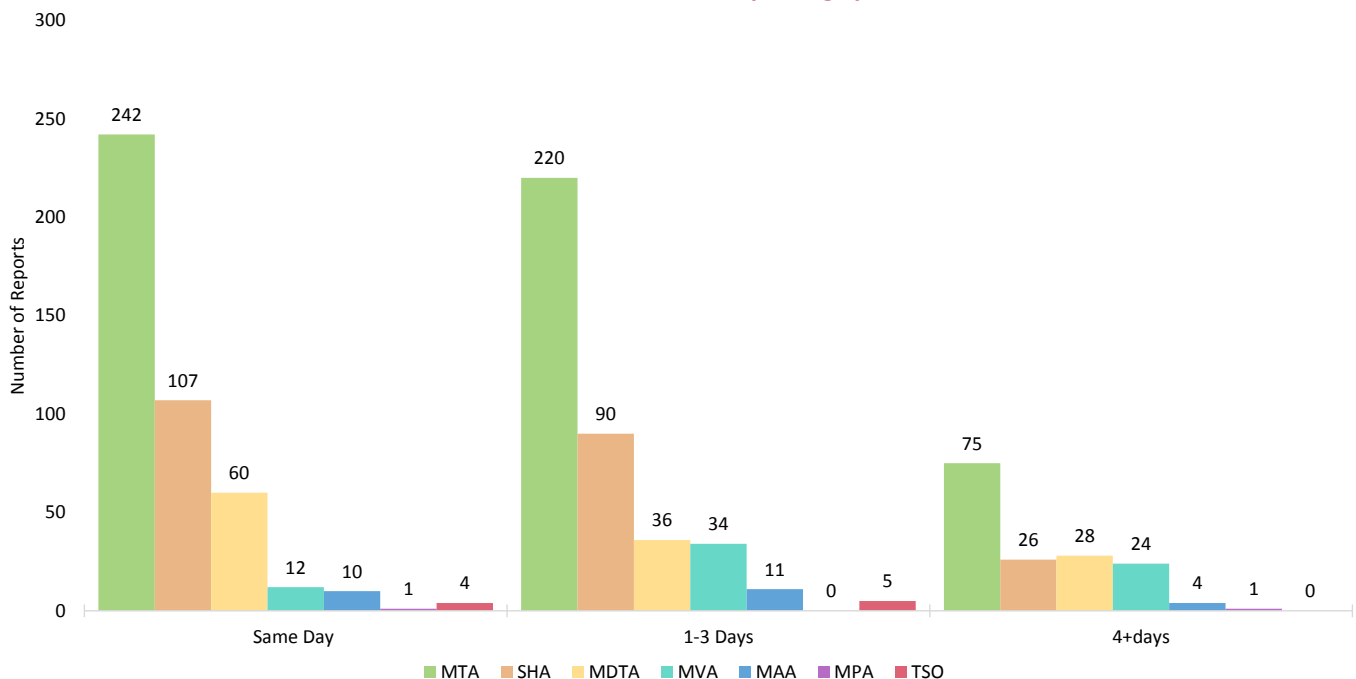


Chart 3.8.2: FY2017 Q3 Reporting Speed



Provide a Safe and Secure Transportation Infrastructure

TANGIBLE RESULT DRIVER:

Sarah Clifford
Maryland Transportation Authority
(MDTA)

PERFORMANCE MEASURE DRIVER:

Cedric Johnson
Maryland Aviation Administration
(MAA)

PURPOSE OF MEASURE:

To track, trend, and mitigate lost work days.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data is collected through multiple MDOT timekeeping systems.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 3.9

Number of Employee Lost Work Days Due to Injuries

Employee safety is a top priority to MDOT. Injuries do occur on the job and work days are sometimes lost as a result. Lost work days reduce the effectiveness of TBUs and are an indirect measure of employee health and welfare.

This measure only includes lost work days due to on the job, work-related injuries. Note that lost work days are associated with the number of injuries reported in Performance Measure 3.8. Factors affecting this measure include varying work conditions and environments, and differing risk profiles amongst employees across TBUs, as well as inconsistent leave coding policies and practices across MDOT's payroll systems.

This is a Q3 comparison of FY 2016 versus FY 2017. Data indicates a FY 2017 decrease in the number of lost work days due to injuries.

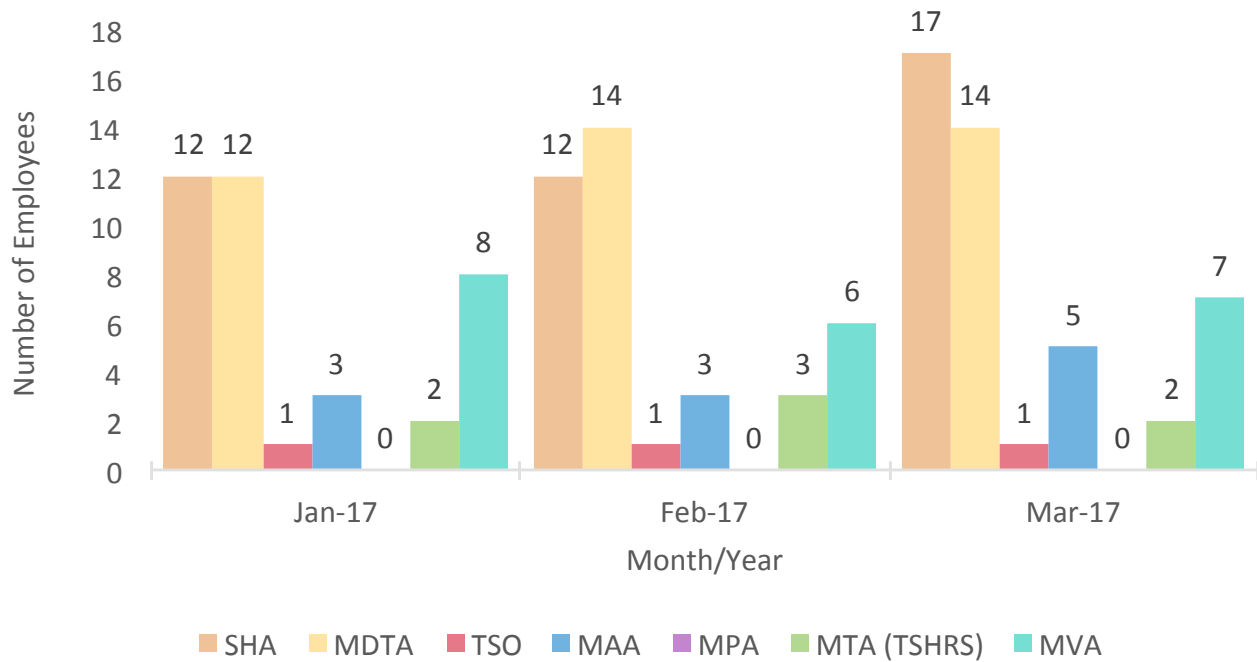
Strategies for reducing employee injuries are affiliated with PM 3.8 and are as follows: Create a MDOT TBU Process Improvement Team, formulate MDOT-wide recommendations on processes/practices to improve documenting and coding work injury leave; create a list of risk mitigation strategies based on types of injuries; identify strategies for mitigating potential work injury leave abuse, and create a capture value of lost work days. TBU Risk Managers meet quarterly to review data, evaluate progress, and develop strategies for emerging risks.

Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.9

Number of Employee Lost Work Days Due to Injuries

Chart 3.9.1: Q3 FY2017 Number of Employees Coding LY (Work Injury Leave)

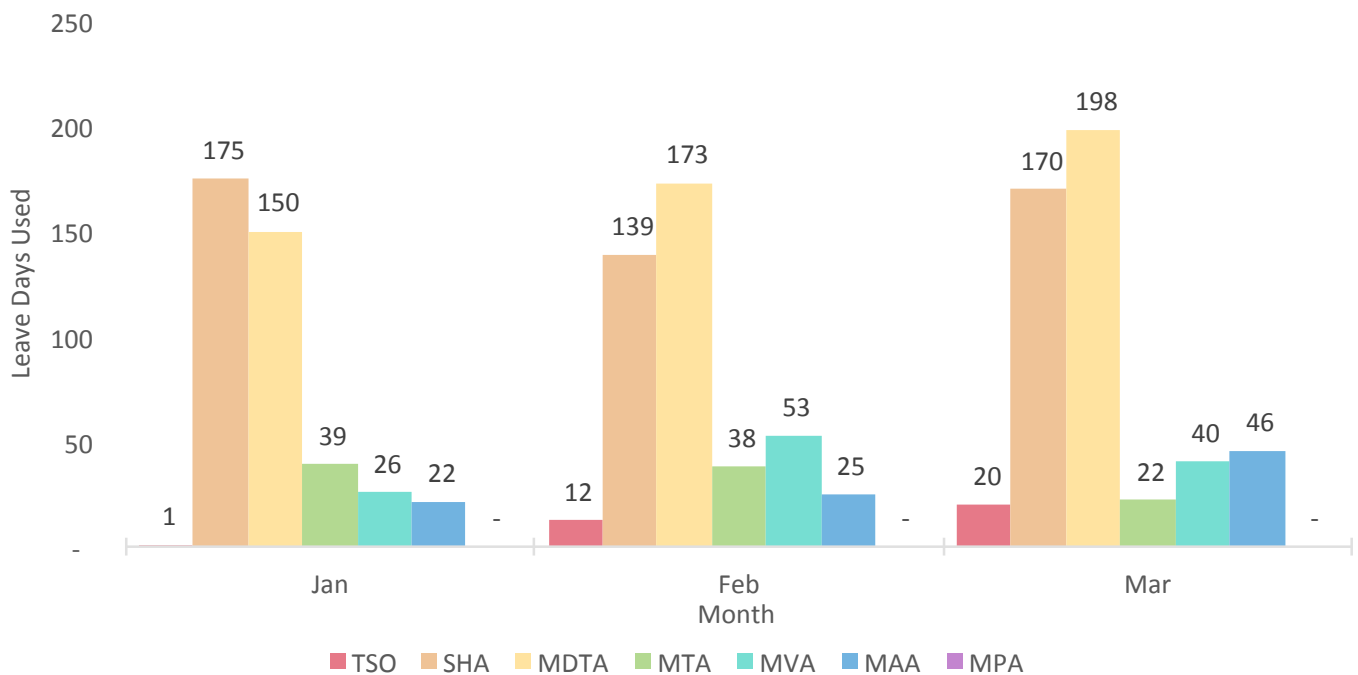


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PERFORMANCE MEASURE 3.9

Number of Employee Lost Work Days Due to Injuries

Chart 3.9.2: FY17 Q3 Number of Work Injury Leave (LY) Days Used



Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.9

Number of Employee Lost Work Days Due to Injuries

Chart 3.9.3: MTA Union Lost Work Days Due to Injuries FY2013 - FY2017 July-March

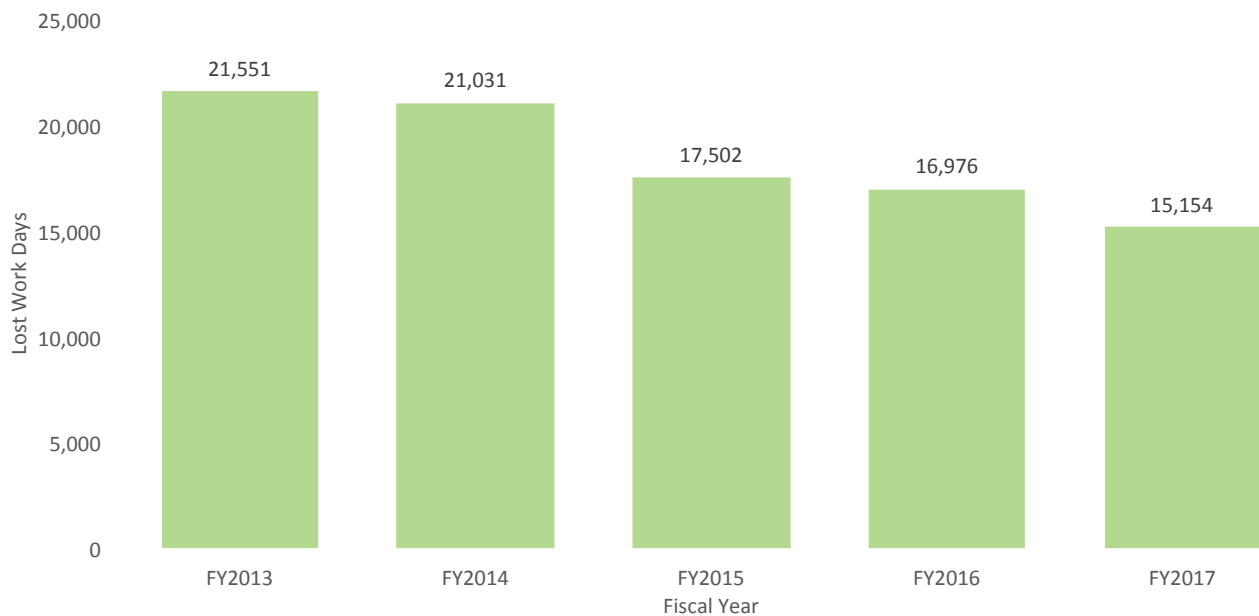
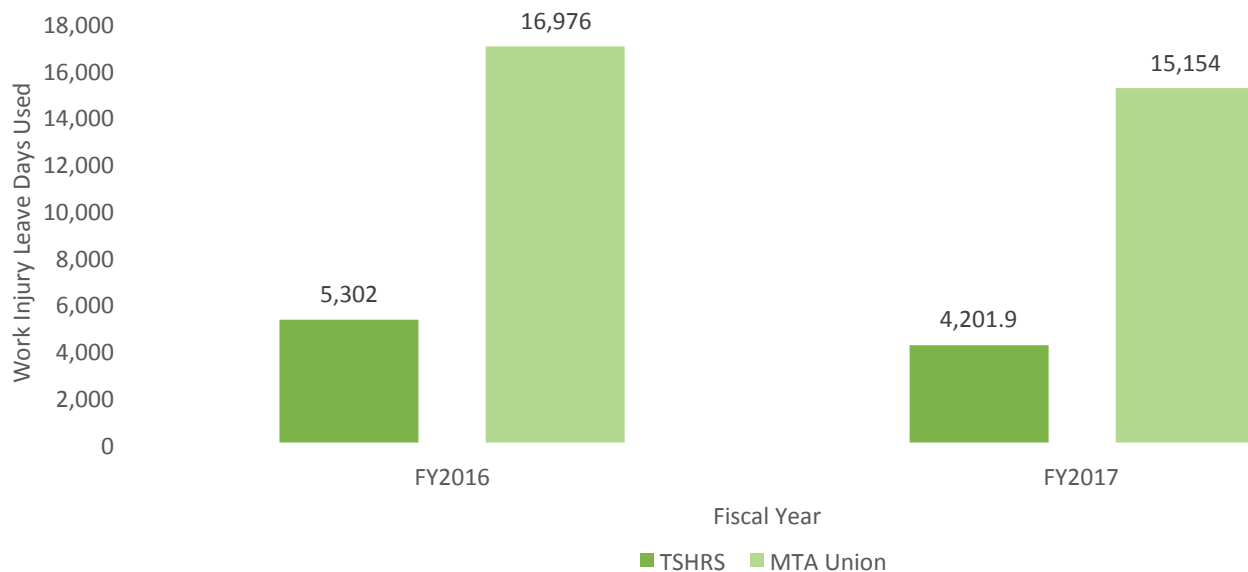


Chart 3.9.4: Number of Work Injury Days Used TSHRS and MTA Union FY2016-FY2017 July - March



Provide a Safe and Secure Transportation Infrastructure

TANGIBLE RESULT DRIVER:

Sarah Clifford
Maryland Transportation Authority
(MDTA)

PERFORMANCE MEASURE DRIVER:

Phil Thomas
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To track customer incidents within MDOT facilities where customers are rendered a service to ensure our customers that MDOT facilities are safe for customers.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

TBUs track using their existing processes and report to the driver via phone or email.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 3.10

Number of Customer Incidents at MDOT Facilities

MDOT has programs in place to ensure the safety and security of its facilities and its customers. TBUs provide many services to the public. MDOT is committed to providing a safe and secure environment to customers which is why measuring unplanned events that may or may not result in injury within enclosed buildings that provide a service to customers (i.e MVA centers, Stop in Centers) is important.

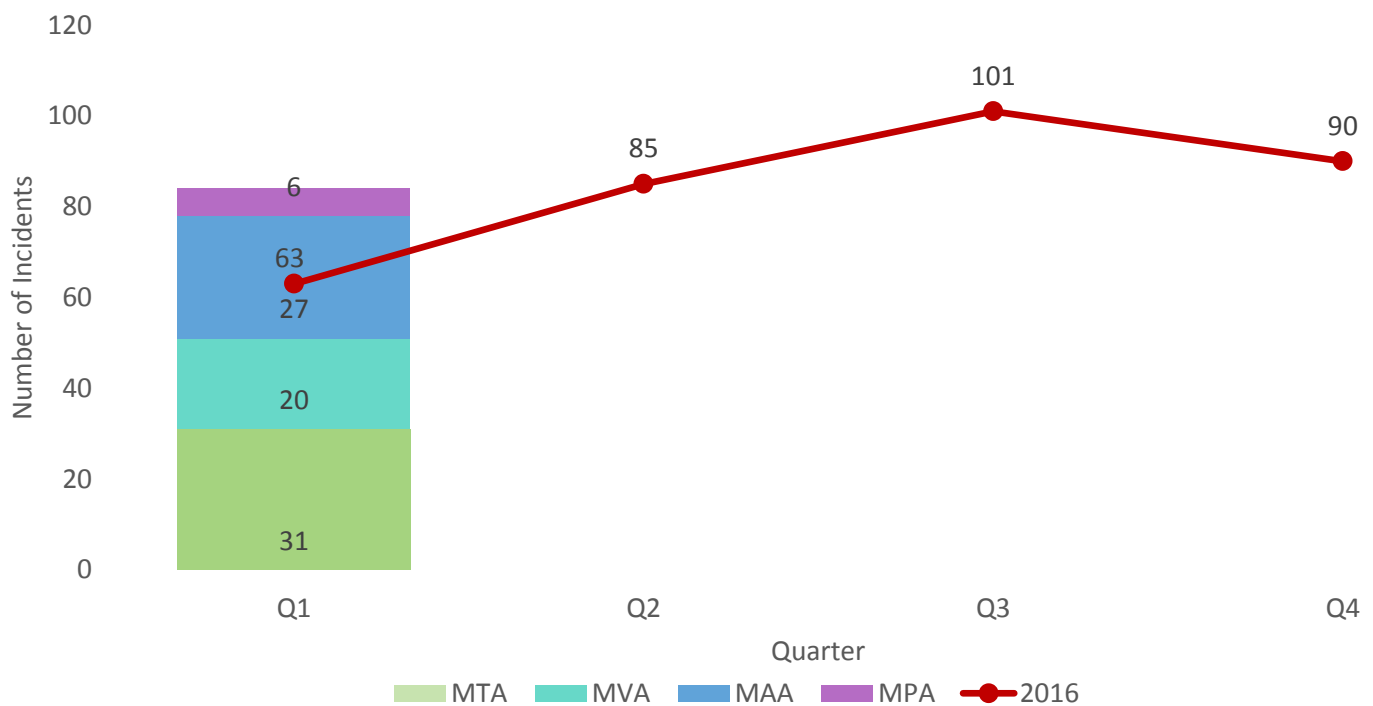
This is still a new measure and MDOT is working with each TBU to ensure that customer incidents are tracked. This measure has allowed for some TBUs to implement new programs and processes to ensure customer incident tracking is occurring. An example is identifying and tracking the number of incidents at MDOT facilities. Identifying and tracking incidents and associated trends offers data for the basis of implementing corrective actions; thereby reducing hazards and minimizing risk for MDOT and customers.

Provide a Safe and Secure Transportation Infrastructure

PERFORMANCE MEASURE 3.10

Number of Customer Incidents at MDOT Facilities

Chart 3.10.1: Number of Customer Incidents at MDOT Buildings CY2017



TANGIBLE RESULT #4

Deliver Transportation Solutions and Services of Great Value



MDOT will deliver transportation solutions on time and within budget. The Department will use strategies to ensure that the transportation solution meets the needs of customers and eliminates unnecessary costs.

RESULT DRIVER:

Jason Ridgway
State Highway Administration (SHA)

Deliver Transportation Solutions and Services of Great Value

TANGIBLE RESULT DRIVER:

Jason Ridgway

State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Terri Lins

Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To gauge the accuracy of capital project estimates to manage the Department's Capital Program more efficiently.

FREQUENCY:

Annually (In October)

DATA COLLECTION METHODOLOGY:

Through the Capital Program Management System (CPMS); the CTP; TSO & TBU's Procurement Offices.

NATIONAL BENCHMARK:

+/- 5% This mirrors the benchmark as reported by Nebraska's Dept. of Roads, Fiscal Responsibility for the Accuracy of Project Estimates. Further, while MDOT has not specified a benchmark per se, they use Nebraska's 5% as the benchmark for the best.

Note: this benchmark applies to capital construction projects. Thus far, and with extensive research, we have been unable to find a benchmark for IT projects.

PERFORMANCE MEASURE 4.1

Percent of Estimated Project Budget as Compared to Final Project Award

This Performance Measure fosters more accuracy and better budget management of the State's limited transportation funding. Accurate estimating enables MDOT to provide better services to its customers, whether it is infrastructure improvements to State roadways and bridges; increasing and retaining the commerce going in and out of the Port of Baltimore; attracting and retaining airlines and travelers at BWI Marshall; providing more alternative service options to Maryland citizens to conduct their MVA transaction remotely; or improving transit services throughout the State.

Given the diverse differences between construction and IT projects, we have separated into two categories with specific budget parameters:

- \$ 1M+ Construction Type Projects: SHA, MDTA MPA, MAA and MTA
- \$400K+ IT Projects: TSO and MVA

For FYs 2014, 2015 and 2016, the range in variance between estimated project budgets and final project awards was from 4.7 percent to 7.6 percent. While the range is within the +/- 5 percent and the estimates vs award are very good, the goal is to continue working on strategies to obtain the +/- 5 percent consistently.

To improve the outcomes of this measure, MDOT is engaged in the following activities:

- Team expansion with subject matter experts (SMEs) from each TBU
- Usage of estimating manual
- Creation of excel spreadsheet to ensure consistency in gathering data for PM 4.1 - PM 4.3
- Clarifying definitions with TBUs
- Modified dataset for construction contracts to \$1M (MAA, SHA, MDTA, MPA and MTA)

PERFORMANCE MEASURE 4.1

Percent of Estimated Project Budget as Compared to Final Project Award

Chart 4.1.1: Variance Percentage - SHA, MDTA FY2014-FY2016

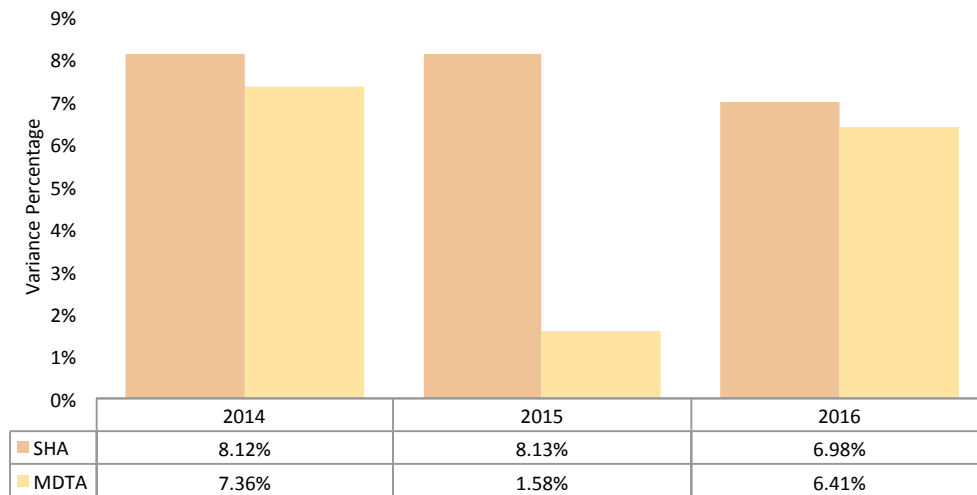
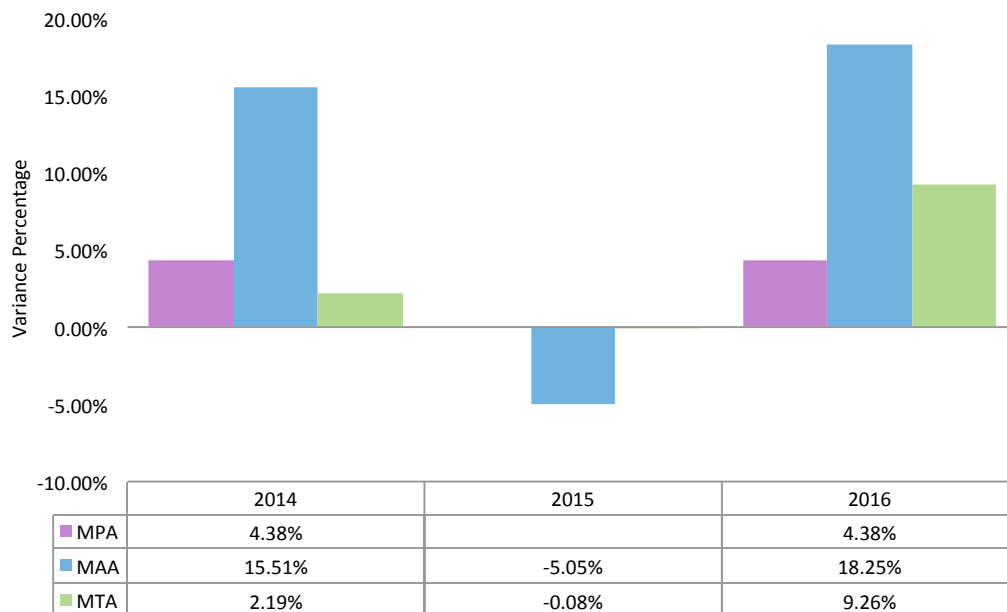


Chart 4.1.2: Variance Percentage - MPA, MAA, MTA FY2014-FY2016



Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.1

Percent of Estimated Project Budget as Compared to Final Project Award

Chart 4.1.1: Variance Percentage - SHA, MVA FY2014-FY2016

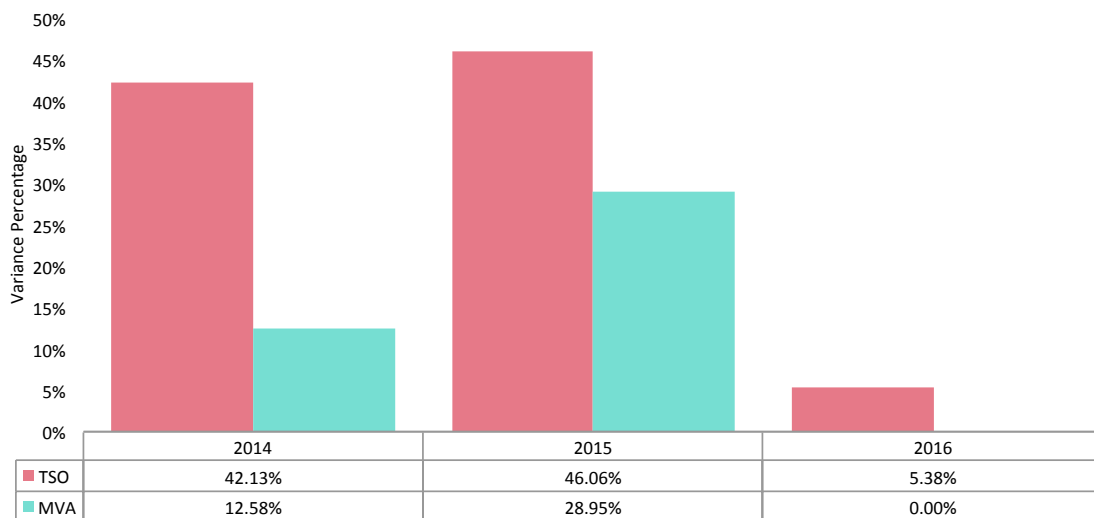
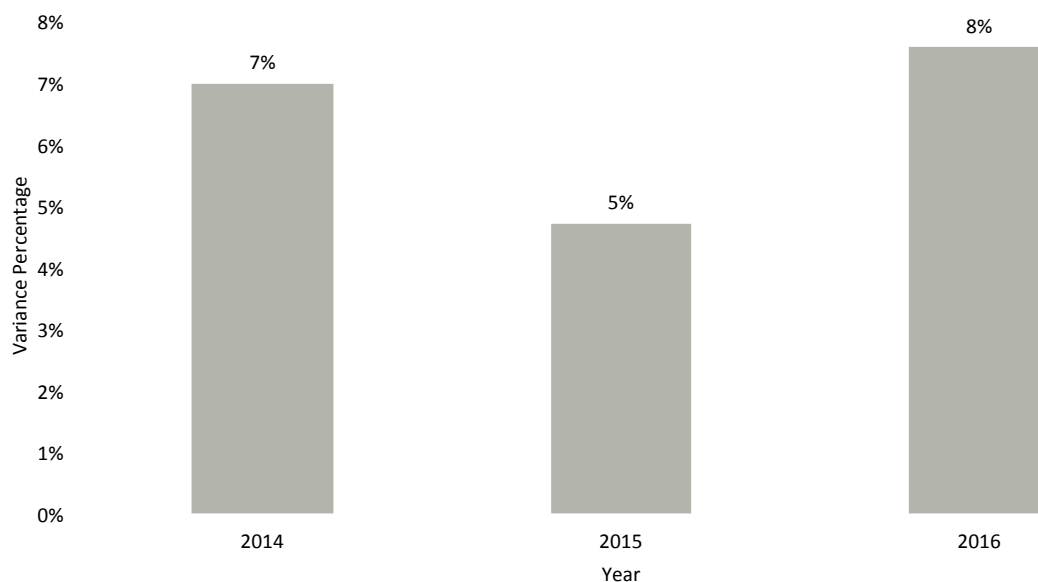


Chart 4.1.4: Variance Percentage- MDOT-Wide FY2014-FY2016



Deliver Transportation Solutions and Services of Great Value

TANGIBLE RESULT DRIVER:

Jason Ridgway
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Brian W. Miller
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To measure the difference in contract amount from Notice to Proceed (NTP) to final contractor payout. This is done to determine the effectiveness of contract management.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Collect data from MDOT TBUs for Fiscal Years 2013 to 2017. Data will reflect contracts that closed out in each respective Fiscal Year. Data will be reflected in a bar graph for each Fiscal Year.

NATIONAL BENCHMARK:

2 % benchmark.

PERFORMANCE MEASURE 4.2

Percent of Change for Finalized Contracts

It is important to assess how well MDOT manages the budgeted and awarded amount during the duration of Department contracts. This is done to ensure MDOT is getting what was paid for and not adding unnecessary or unbudgeted costs to transportation projects. This will facilitate better contract performance and better management of contracts which will add overall value to the project and ensure worthwhile expenditures of taxpayer dollars.

TBUs will monitor contracts and justify any overages through contract changes and justifications for those changes.

At present all TBUs are maintaining contracts below 2 percent. The reason for any TBU posting overages of 2 percent is due to a contract that experienced unexpected contract changes due to unforeseen developments during the course of construction. The changes have been justified by the respective TBU. Also, individual TBUs may not have data from a fiscal year if no contract(s) closed during the respective fiscal year.

Should issues arise with any TBU where all contracts are showing overages well above 2 percent a more refined strategy development will take place to determine the causes of these contract management issues and corresponding strategies to correct the problem(s).

Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.2

Percent of Change for Finalized Contracts

Chart 4.2.1: FY2013 Percent of Change for Finalized Contracts

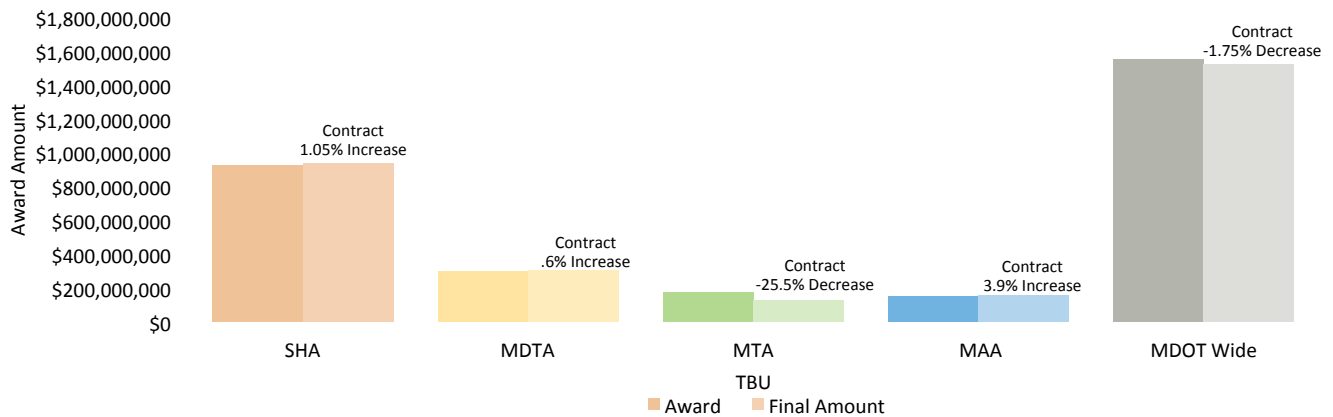
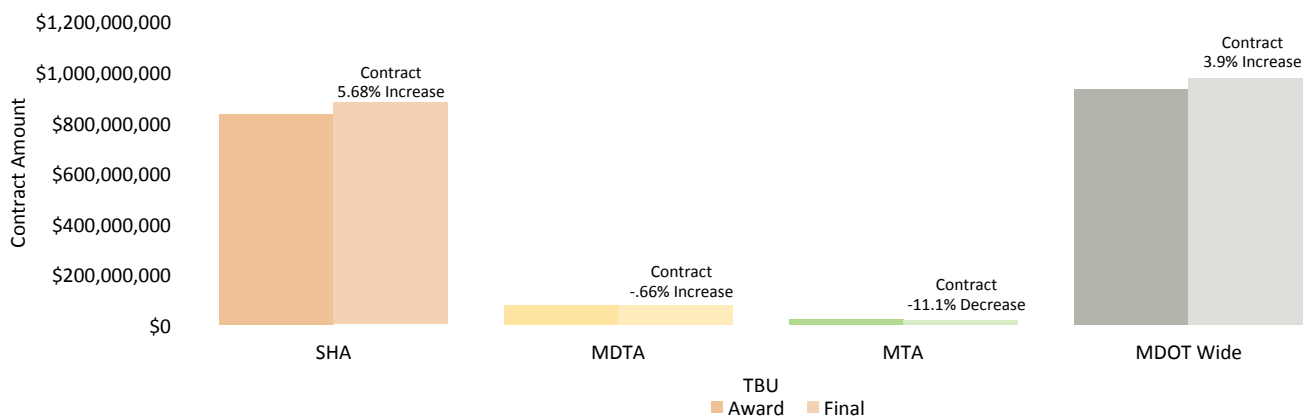


Chart 4.2.2: FY2014 Percent of Change for Finalized Contracts



Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.2

Percent of Change for Finalized Contracts

Chart 4.2.3: FY2015 Percent of Change for Finalized Contracts

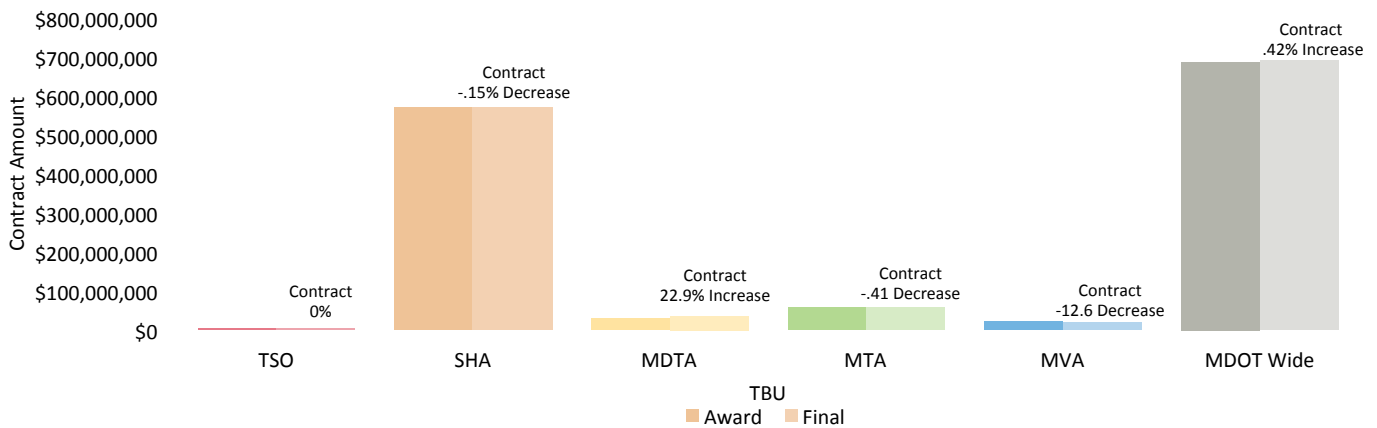
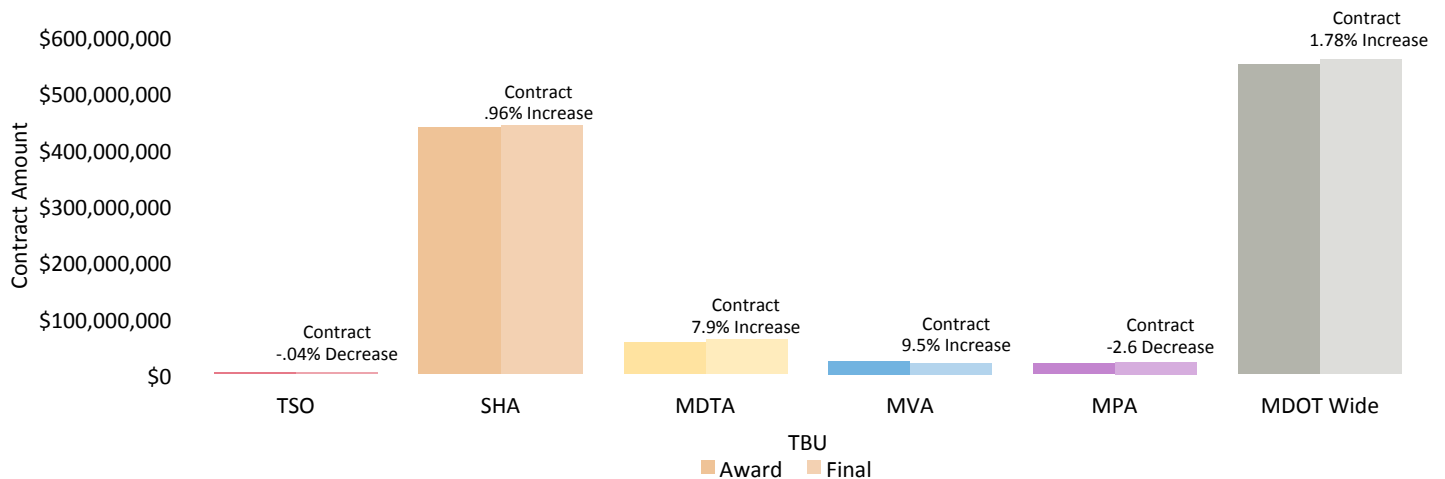


Chart 4.2.4: FY2016 Percent of Change for Finalized Contracts



Deliver Transportation Solutions and Services of Great Value

TANGIBLE RESULT DRIVER:

Jason Ridgway
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Bill Appold
The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To determine if MDOT is efficiently managing and delivering contracts and services.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Information will be provided by the MDOT Offices of Construction, Planning and Finance.

NATIONAL BENCHMARK:

87%

PERFORMANCE MEASURE 4.3

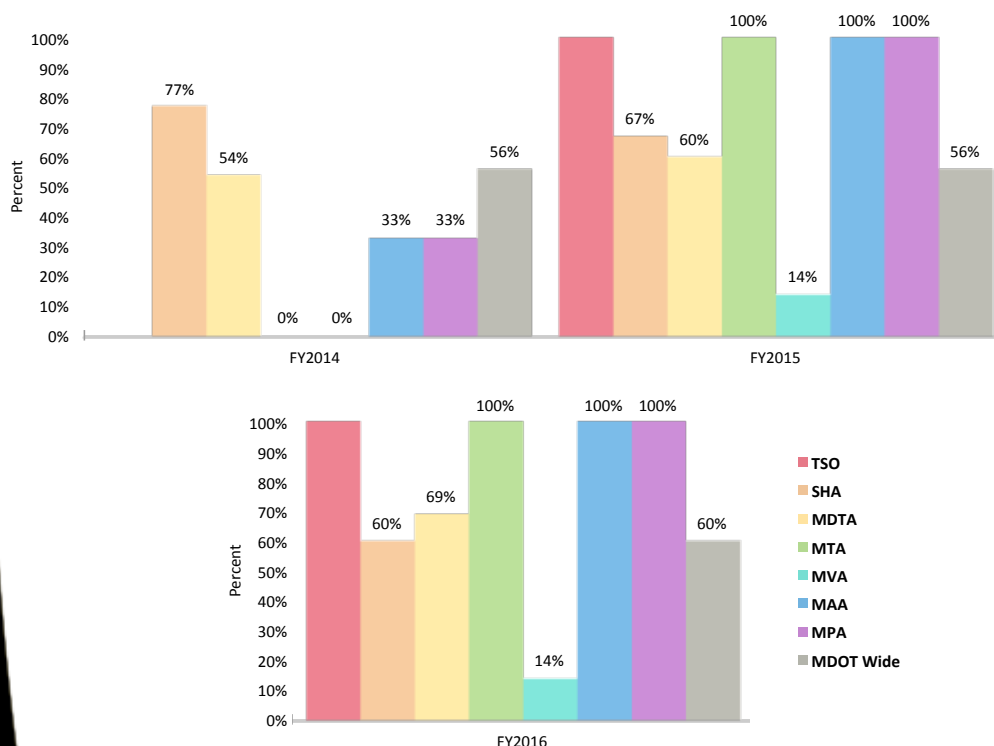
On-time Services and Solutions: Percent of Projects Completed by Original Contract Date

When MDOT awards a contract or agrees to provide a service, it establishes a commitment date which is the date the contract or service begins providing benefits to MDOT's stakeholders.

The purpose of this performance measure is to track MDOT's accuracy in estimating if contracts and services are completed and open to service by the commitment date specified in the contract. The performance measure will also determine if there are common factors that make contracts go over their budgeted time and whether these factors can be mitigated.

Overall MDOT increased the percentage of contracts completed in a timely basis from 56 percent in FY 14 and FY 15 to an FY 16 total of 60 percent. This is due to an increase in timely completions from MDTA and also a large increase in total contracts closed by SHA increasing the weight of their overall percentage.

Chart 4.3.1: On Time Services and Solutions, Percent of Projects Completed by Original Contract Date FY2014-FY2016



Deliver Transportation Solutions and Services of Great Value

TANGIBLE RESULT DRIVER:

Jason Ridgway

State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Pat Keller

Maryland Transit Administration (MTA)

Jim Harkness

Maryland Transportation Authority (MDTA)

Wayne Schuster

Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To track the average cost of common transportation services and solutions, in order to make decisions as to where to reduce costs, as appropriate.

FREQUENCY:

Annually (in January and July)

DATA COLLECTION METHODOLOGY:

Through the Capital Program Management System (CPMS); The Consolidated Transportation Plan (CTP) and MDOT Capital Budget, Finance and Procurement Offices.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 4.4

Average Cost of Common Transportation Solutions and Services

It is MDOT's responsibility to provide transportation solutions and services to the public that are of great value.

The purpose of these measures is to track, access, and analyze data that will help reveal solutions for reducing the cost of transportation services. Tracking data that is grouped by shared services across business units will allow comparison across TBUs, and also insight into ways to reduce the cost of services to the public.

Performance measure 4.4 has 10 separate measurements. These measurements include minor and major road resurfacing cost, interstate road resurfacing cost, bridge replacement cost and major bridge redecking cost. Other measurements include operating cost per passenger trip, operating cost per revenue vehicle mile, passenger trips per revenue vehicle mile, farebox recovery and cost per transaction.

Tracking of these measures is based upon actual costs associated with contracts issued for various road and bridge projects. Because data for these projects is tracked annually, in any given year there may not be an award for this type of project as can be seen from some of the MDTA data. Regardless, the data will provide our customers with insights into how Maryland transportation projects compare to national averages.

Benchmarks are sought to gauge how Maryland solutions and services compare with national averages as well as who is considered the best in this category. Based on year to year data comparisons, the goal is to identify ways to reduce costs to the citizens of Maryland.

Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.4A

Average Cost of Common Transportation Solutions and Services

Chart 4.4A.1: Minor Road Preservation Cost FY2014-FY2016

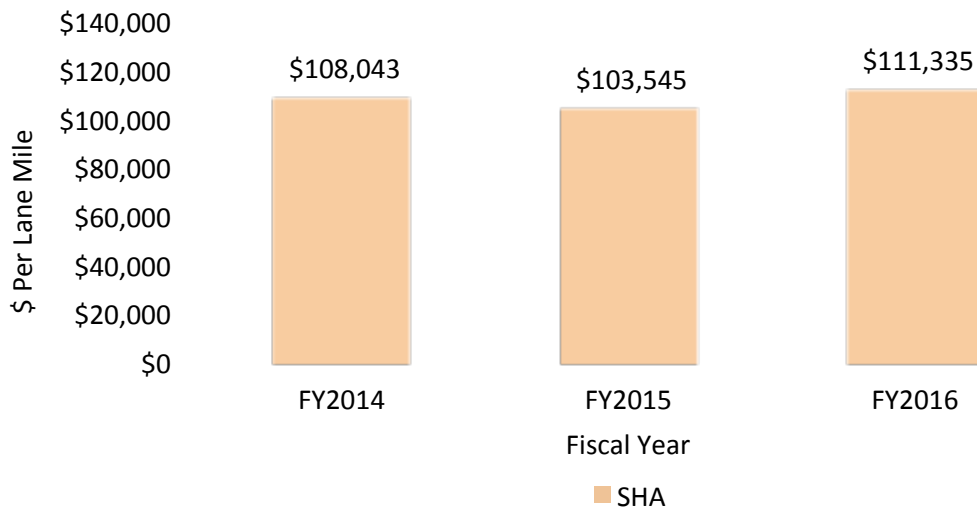
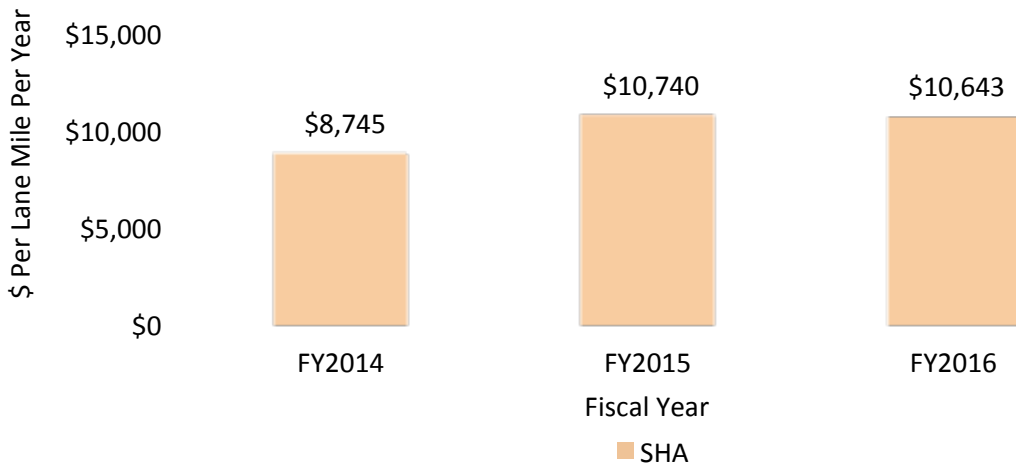


Chart 4.4A.2: Minor Road Preservation Life Cycle Cost FY2014-FY2016



Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.4B

Average Cost of Common Transportation Solutions and Services

Chart 4.4B.1: Major Road Preservation Cost FY2014-FY2016

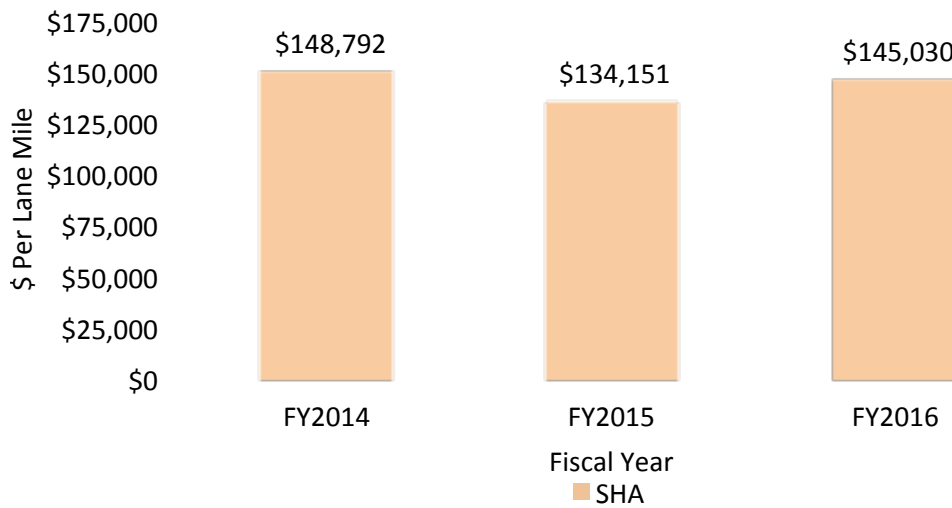
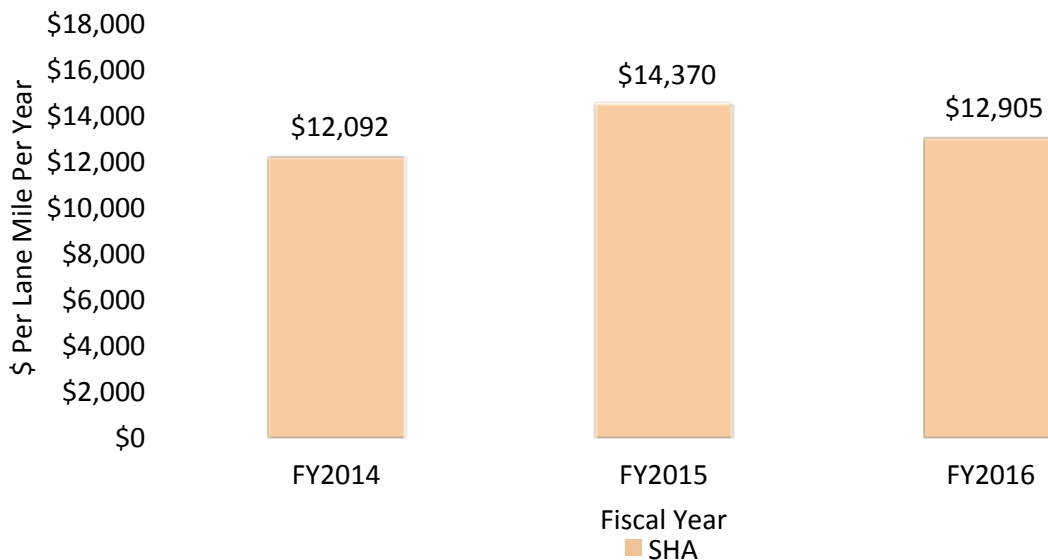


Chart 4.4B.2: Major Road Preservation Life Cycle Cost FY2014-FY2016



Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.4C

Average Cost of Common Transportation Solutions and Services

Chart 4.4C.1: Interstate Preservation Cost FY2014-FY2016

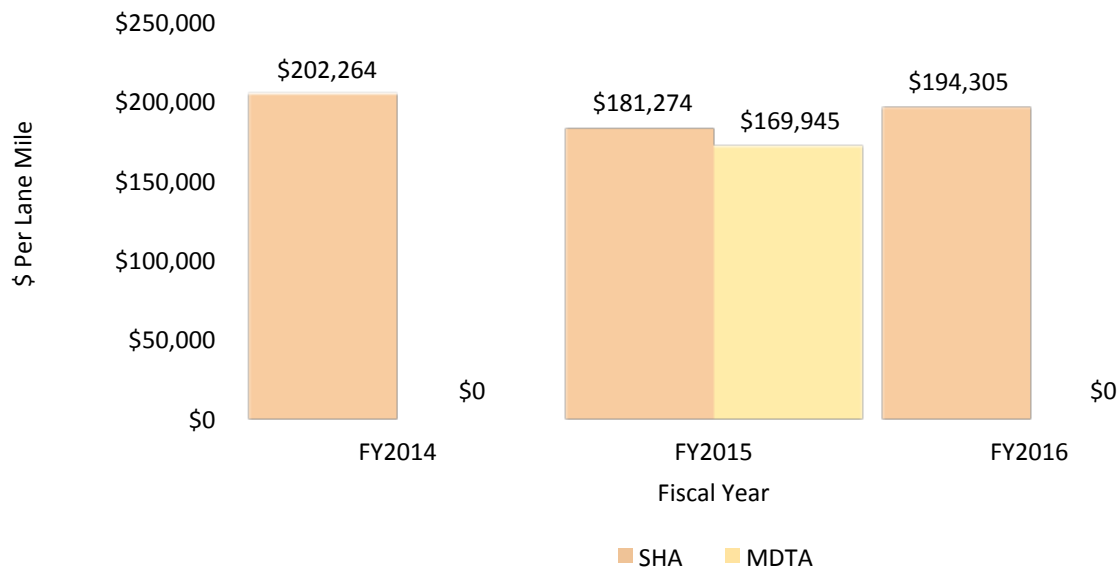
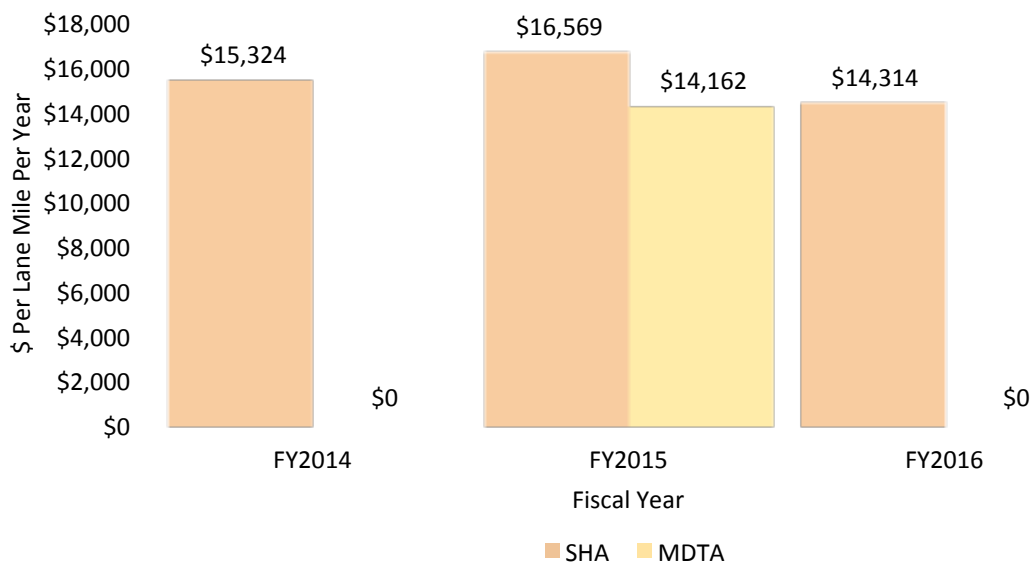


Chart 4.4C.2: Interstate Preservation Life Cycle Cost FY2014-FY2016



Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.4D AND E

Average Cost of Common Transportation Solutions and Services

Chart 4.4D.1: Average Bridge Replacement Cost FY2015-FY2017

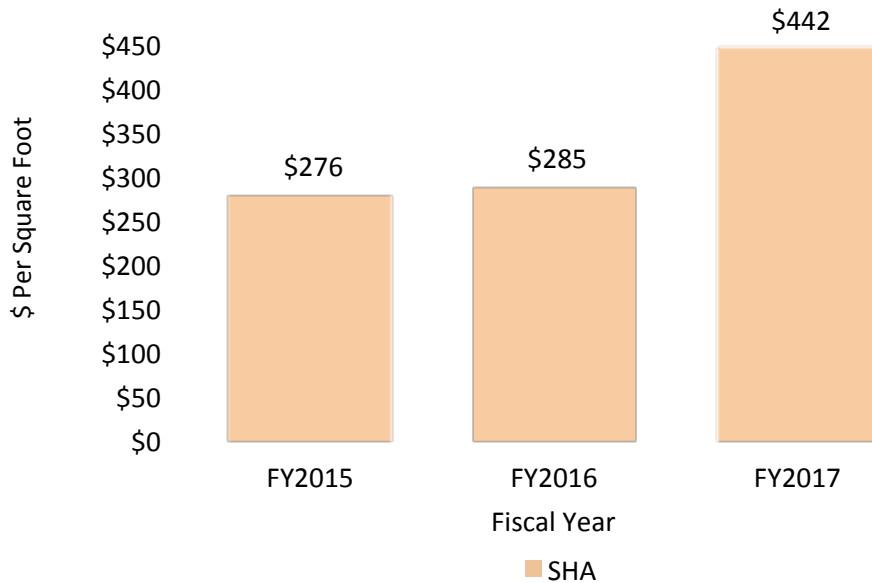
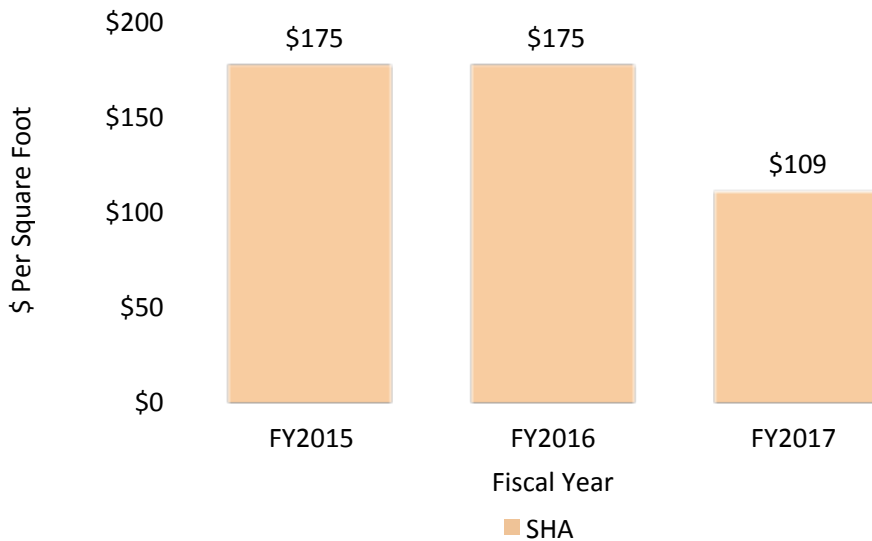


Chart 4.4E.1: Average Bridge Redecking Cost FY2015-FY2017



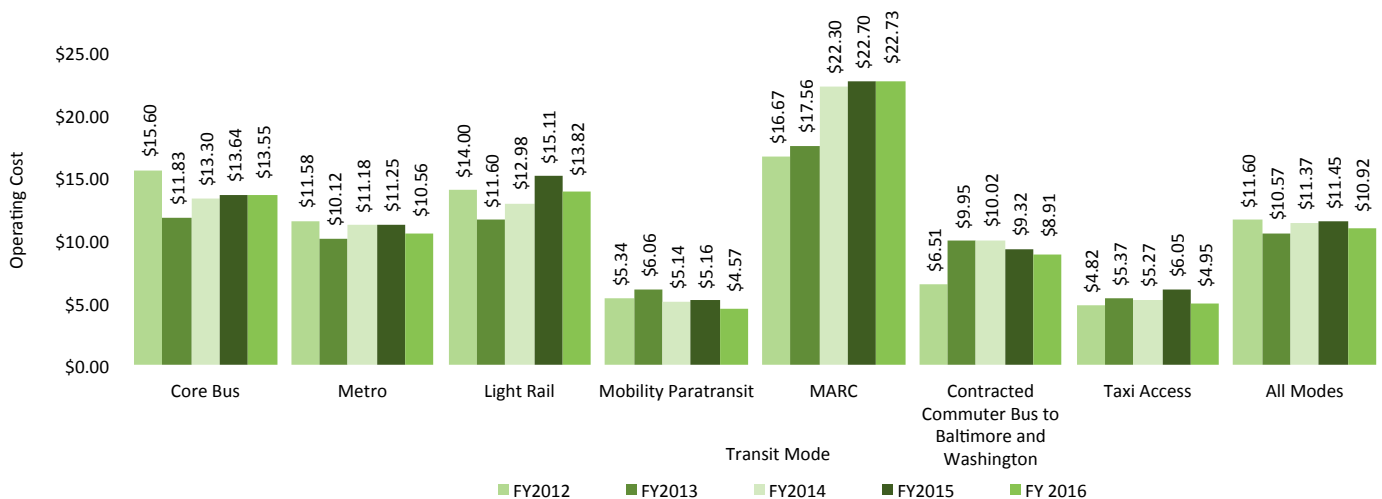
Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.4F

Average Cost of Common Transportation Solutions: Operating Cost per Passenger Trip (MTA)

Operating cost per passenger trip is an indication of how effectively and efficiently the MTA is producing service given the operating costs. Ideally, a lower operating cost per passenger trip demonstrates the ability to move passengers in an efficient and effective manner.

Chart 4.4F.1: Operating Cost Per Passenger Trip FY2012-FY2016



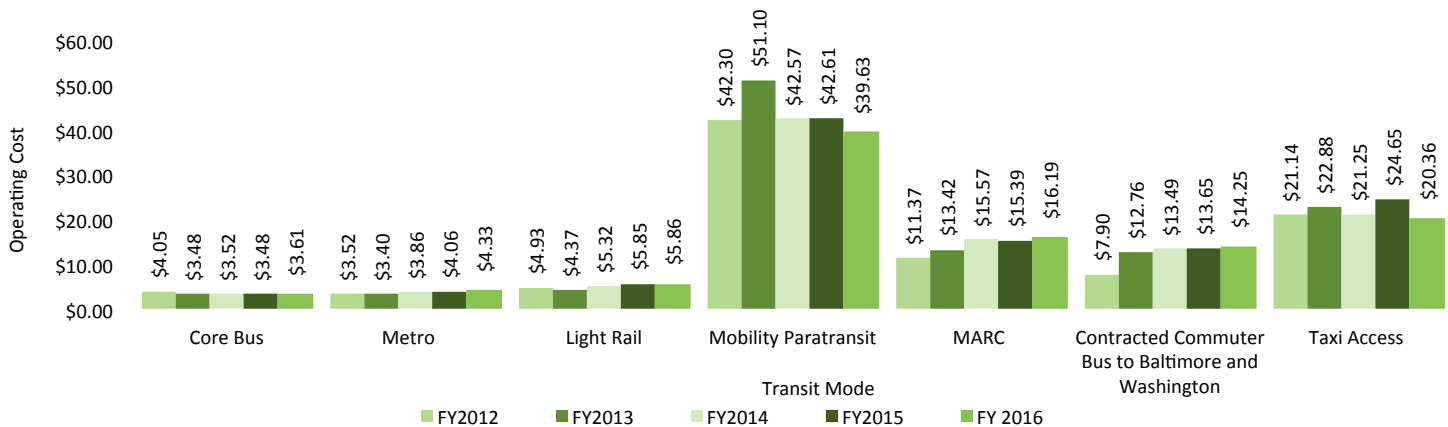
Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.4G

Average Cost of Common Transportation Solutions: Operating Cost per Revenue Vehicle Mile (MTA)

Operating cost per revenue vehicle mile is an indication of the cost efficiency of the MTA in producing service given operating costs and scheduling of service. Ideally, when a transit vehicle is in operation, the goal is to be in revenue service vs. deadhead or repair. A lower operating cost per revenue vehicle mile demonstrates an efficient, well scheduled service and maintained fleet.

Chart 4.4G.1: Operating Cost Per Revenue Vehicle Mile FY2012-FY2016



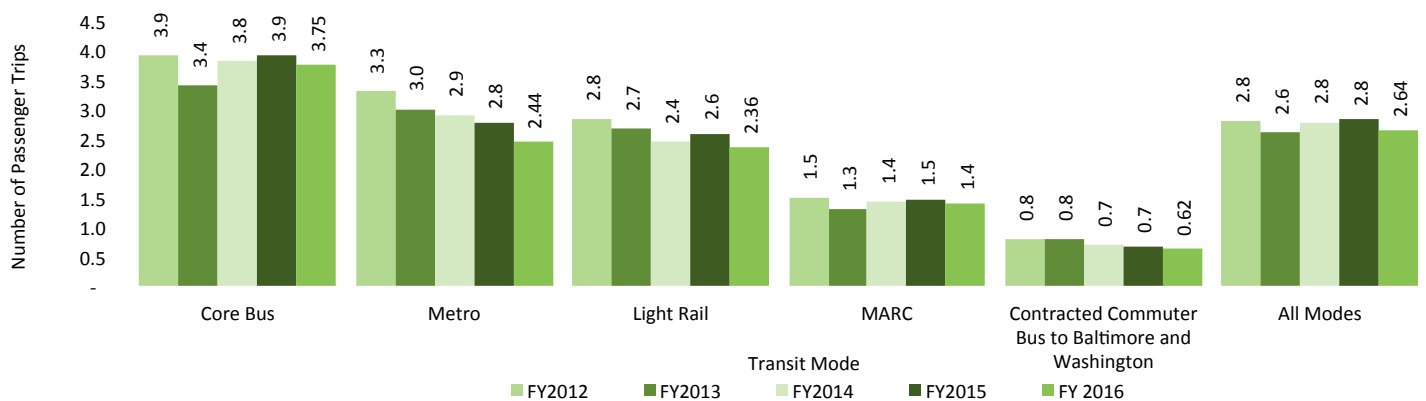
Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.4H

Average Cost of Common Transportation Solutions: Passenger Trips per Revenue Vehicle Mile (MTA)

Passenger trips per revenue vehicle mile demonstrates the effectiveness of the transit's operating schedule showing scheduled service in such a way as to carry as many passengers as practicable without overcrowding the service.

Chart 4.4H.1: Passenger Trips Per Revenue Vehicle Mile FY2012-FY2016



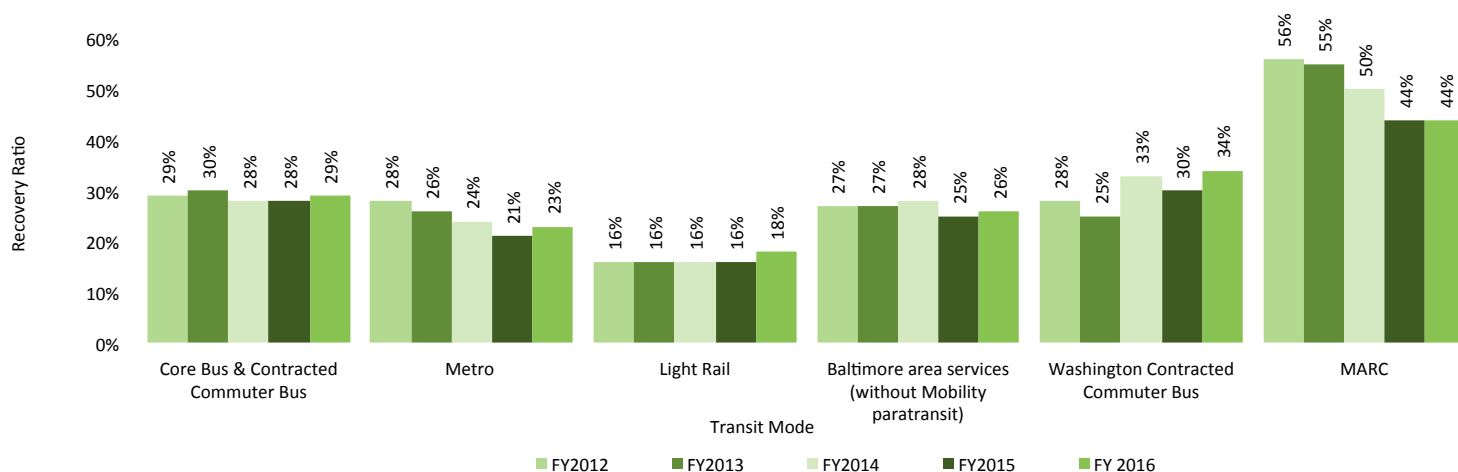
Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.4I

Average Cost of Common Transportation Solutions: Farebox Recovery Ratio (MTA)

Farebox recovery ratio measures the percent of operating costs recovered through fares. Various factors affect the recovered operating costs such as fare price, ridership levels, and operating costs such as labor, fuel, and repair. State law mandates that MTA achieve a 35 percent Farebox Recovery Ratio.

Chart 4.4I.1: Farebox Recovery Ratio FY2012-FY2016



Deliver Transportation Solutions and Services of Great Value

PERFORMANCE MEASURE 4.4J

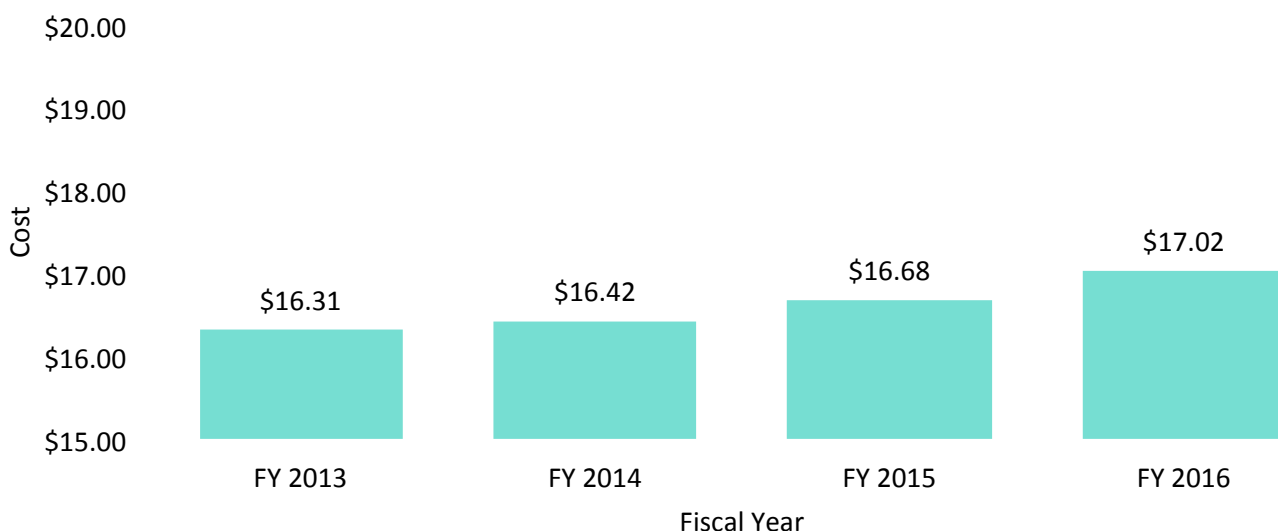
Average Cost of Common Transportation Solutions: Cost per Transaction (MVA)

Cost per transaction is based on the total Operating Expense compared to the total number of Customer Transactions. The Operating Expense is inclusive of salaries and wages, including overtime. Operating expenses also include MVA costs to provide driver's licensing, vehicle registration and titling customer services.

The ways in which MVA provides its services to its customers is a factor in the costs per transaction. For example, IT system enhancements (introducing alternative service delivery options to customers) offer higher levels of convenience and customer satisfaction. Recent service improvements include the ability for a customer's vision provider to submit vision exam results electronically to MVA for licensing purposes, thus allowing some customers to renew their license via the web in lieu of standing in a license renewal line. Other such innovative service delivery using computer-based methods are included in the costs per transaction.

Trends in cost per transaction can vary when new technologies are implemented. Initial technology rollout costs tend to create a spike in costs, but after implementation, cost per transaction usually stabilizes and then declines. Other factors included in cost per transaction include the number of transactions required to complete customer service or product requests; increases in vehicle sales, which can be more costly to process (full titling transactions); and changes in driver's licensing laws requiring more time-consuming customer identification screening.

Chart 4.4J.1: Average Cost Per MVA Transaction FY2013-FY2016



TANGIBLE RESULT #5

Provide an Efficient, Well-Connected Transportation Experience



MDOT will provide an easy, reliable transportation experience throughout the system. This includes good connections and world class transportation facilities and services.

RESULT DRIVER:

Phil Sullivan

Maryland Transit Administration (MTA)

Provide an Efficient, Well-Connected Transportation Experience

TANGIBLE RESULT DRIVER:

Phil Sullivan

Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Scott Jacobs

Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To assess average wait time at facilities.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Verification of average wait times at facilities for services based on MDTA reporting the percentage of tolls collected via cash payment at toll facilities.

NATIONAL BENCHMARK:

N/A

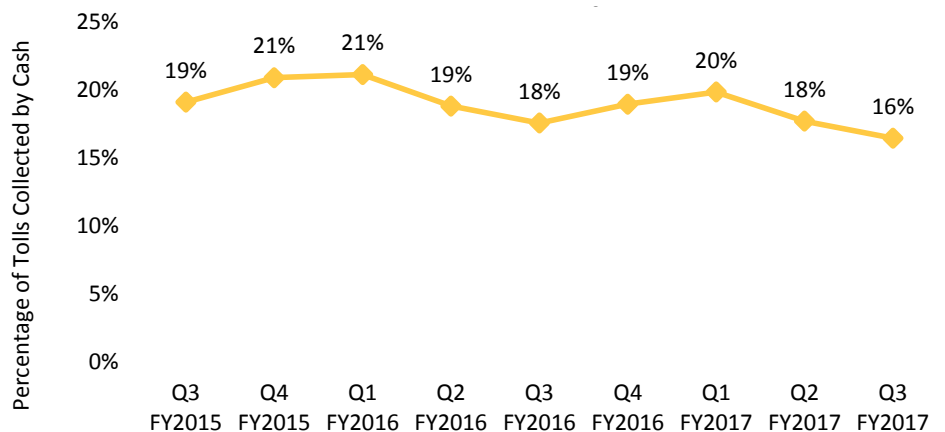
PERFORMANCE MEASURE 5.1A

Reliability of the Transportation Experience: Percentage of Tolls Collected by Cash

Cash tolls cause more congestion and wait times are considerably longer. Customers expect limited congestion and minimal wait times, particularly at paid toll facilities. A decrease in this measure indicates more free flow traffic using electronic means of payment and thus a decrease in congestion and wait times.

Currently this measure has been trending positively with decreases in the past year. As of FY2017 Q3, 16.46 percent of tolls collected were done with cash, which represents a 1.12 percent decrease from FY2016 Q3. MDOT continues to market Electronic Toll Collection and the lanes and signage reconfiguration in the current tri-message sign project is now in procurement.

Chart 5.1A.1: Percent of Tolls Collected by Cash for All Mixed Facilities FY2015-FY2017



Provide an Efficient, Well-Connected Transportation Experience

TANGIBLE RESULT DRIVER:

Phil Sullivan
Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Jeffrey Gutowski
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To assess average turn time at facilities to ensure an efficient transportation experience for the customers.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Verification of average turn times at port facilities for services.

NATIONAL BENCHMARK:

There is not a national benchmark. However, in researching Trade and Industry Publications and Trucking Associations, 45 minutes can be established as an efficient turn time.

PERFORMANCE MEASURE 5.1B

Reliability of the Transportation Experience: Average Truck Turn Around Time per Container Transaction

This performance measure is important because customers of MDOT Port facilities expect reasonable turn around times to obtain needed services. The reliability of the transportation experience is assessed through average truck transaction turn around times at facilities to ensure that customers have an efficient transportation experience. This measure will allow MDOT to monitor the service provider and improve turn around times at container facility. The data will be reported and reviewed annually.

MPA is reporting on container transaction turn around time handled by trucks at Seagirt Marine Terminal by fiscal year. The gate turn around time is determined by the accumulated time that each truck remains on the terminal to complete its transaction (gate-in and gate-out). The primary objective of the Port is to maintain industry leading turn around times of 45 minutes or less. Turn around times have increased slightly in FY2016 from 28.4 minutes to 30.7 minutes per transaction, which remains well below industry standards. The increase is directly attributed to elevated container volumes being handled at the terminal due to the Panama Canal expansion allowing for larger vessels to call at the facility.

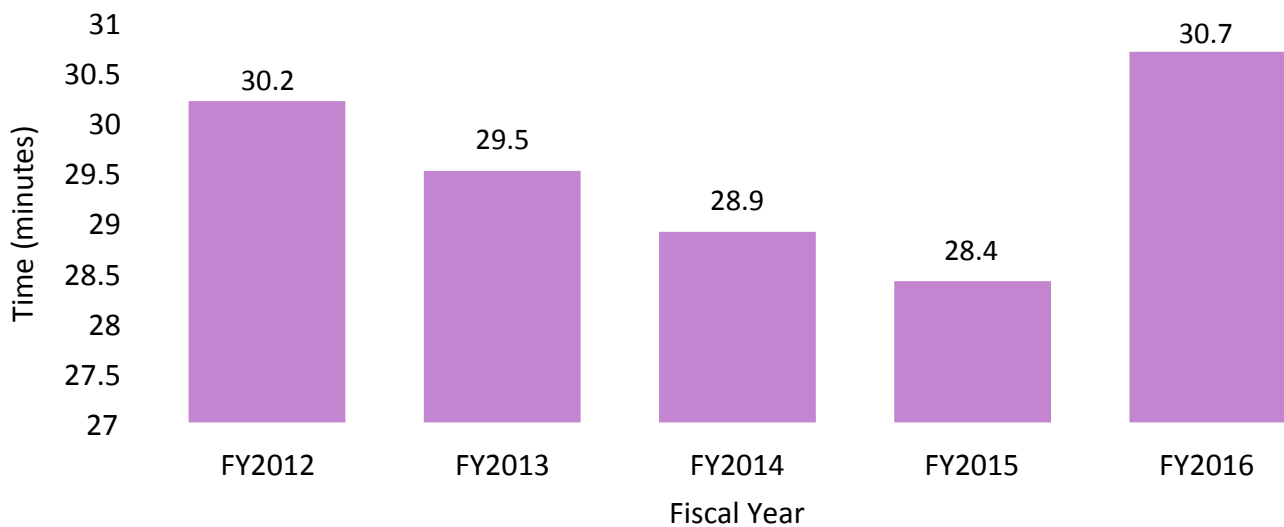
Continual improvement of the trucker experience is important to MPA as well as the terminal operator. MPA and the terminal operator are committed to improving the truck turn around times through streamlined gate processes, terminal infrastructure investments, extended gate operating hours, deployment of new technologies and investments in new container handling equipment. In addition, maintaining active lines of communication with the Maryland Motor Truck Association, Longshoreman's Association, Customs and Border Protection and United States Coast Guard are very effective ways to eliminate unnecessary and unwarranted delays in the processing of trucks.

Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.1B

Reliability of the Transportation Experience: Average Truck Turn Around Time per Container Transaction

Chart 5.1B.1: Average Annual Truck Turn Around Time per Unit (Box) at Seagirt Marine Terminals FY2012 - FY2016



Provide an Efficient, Well-Connected Transportation Experience

TANGIBLE RESULT DRIVER:

Phil Sullivan

Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Jeffrey Gutowski

Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To assess average wait time at MVA facilities.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Verification of average wait times at MVA facilities for services.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 5.1C

Reliability of the Transportation Experience: Average Wait Time (MVA)

This performance measure is important as customers of MDOT expect reasonable wait times to obtain needed services and products. The reliability of customer transportation experiences was assessed through monitoring of average wait times at MDOT MVA facilities. The data will be reported and reviewed quarterly.

Currently, the MVA will report the average wait time for customers to obtain services and products at all branch offices. The statewide average wait time goal for FY2017 is 21.7 minutes. During the current FY2017 Q3 reporting period, the MDOT MVA recorded an average statewide wait time of 20.5 minutes, which was below the stated goal.

In February, the MVA implemented a change which allows customers with temporary tags to order a full two-year registration online or at a kiosk in an MVA branch. Previously they had to go to a counter. In March, the MVA allowed customers to process a tag return on a tablet; they do not even need to get a ticket. There are close to 200,000 renewals performed after a safety inspection, and close to 500,000 tag returns performed each year, which indicates many transactions are being moved to alternative services. These new initiatives, combined with the following efforts have assisted with continual improvements in MVA wait times:

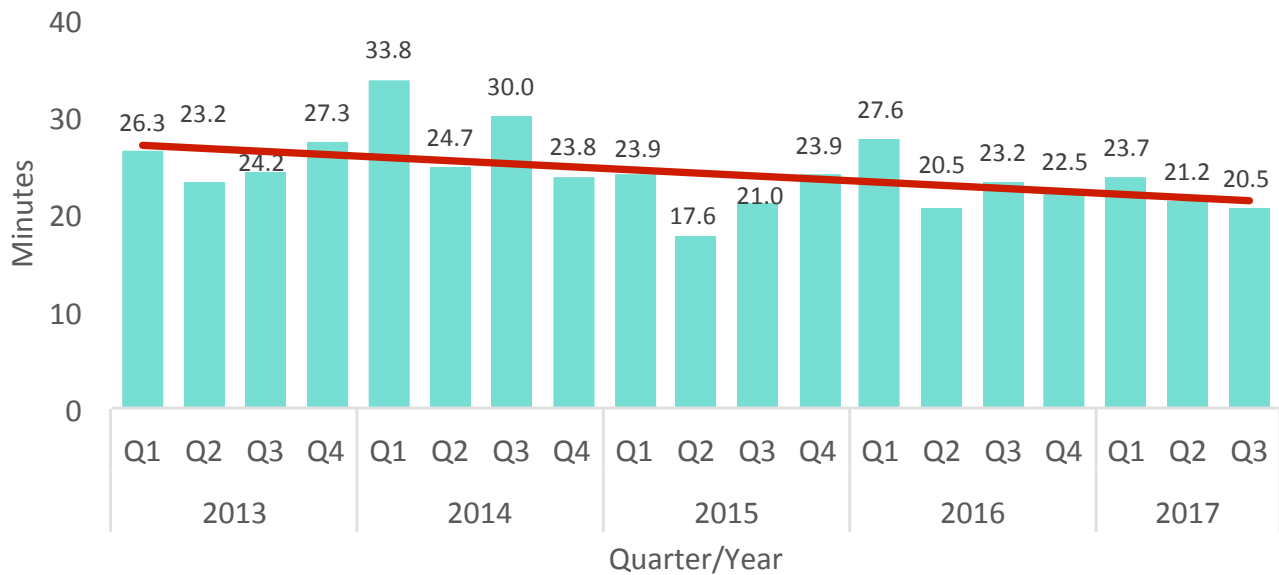
- Centralized process for issuing all driver's licenses and identification cards
- Electronically screening all customers at the Customer Information Counter to identify whether the customer could get immediate service at a kiosk

Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.1C

Reliability of the Transportation Experience: Average Wait Time (MVA)

Chart 5.1C.1: Average MVA Wait Time FY2013-FY2017



Provide an Efficient, Well-Connected Transportation Experience

TANGIBLE RESULT DRIVER:

Phil Sullivan

Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Robert Pond

Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To assess the percent of on-time performance of our transportation service by mode to ensure a more reliable transportation experience for our customer.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Varies by Mode:

- Bus Data is collected by the CAD/AVL System.
- Rail Mode data is collected by the modal control rooms.
- Paratransit data is transmitted by on-board MDT to the Scheduling System or validated by a call from vehicle to a Manager upon rider pick up.

NATIONAL BENCHMARK:

Per APTA Standards Modal OTP Benchmarks are as follows:

Bus – 78 percent

Rail – 90 percent

Para-Transit – 92 percent

PERFORMANCE MEASURE 5.1D

Reliability of the Transportation Experience: On-Time Performance (MTA & MAA)

Reliability of transportation services is important to MDOT customers since many rely on posted arrival and departure times to make needed connections and for critical appointments. This measure will allow the TBUs to focus resources where needed to improve on-time performance.

The public timetable has been referred to as “our contract with our riders.” On-Time Performance (OTP) is the measurement of adherence to that contract. Maintaining a high level of OTP is of critical importance when providing ground transportation.

Whether a customer has a one-seat ride or needs to make a complex intermodal connection, the rider has an expectation that services will be provided reliably and as scheduled. MTA and MAA schedule adherence drives not only customer perception of the service provided, but efficient use of taxpayer dollars, management processes, and the efficiency and reliability of State Government.

As an agency, MTA continues to meet or exceed APTA benchmarks for OTP across Bus (78 percent) Rail (90 percent), and Paratransit (92 percent) modes. The commitment to continual improvement of OTP is evident in efforts to provide a transit network that allows passengers to travel more efficiently throughout our service area utilizing schedules that accurately reflect passenger travel times, driving down service related complaints and resulting in a better passenger experience.

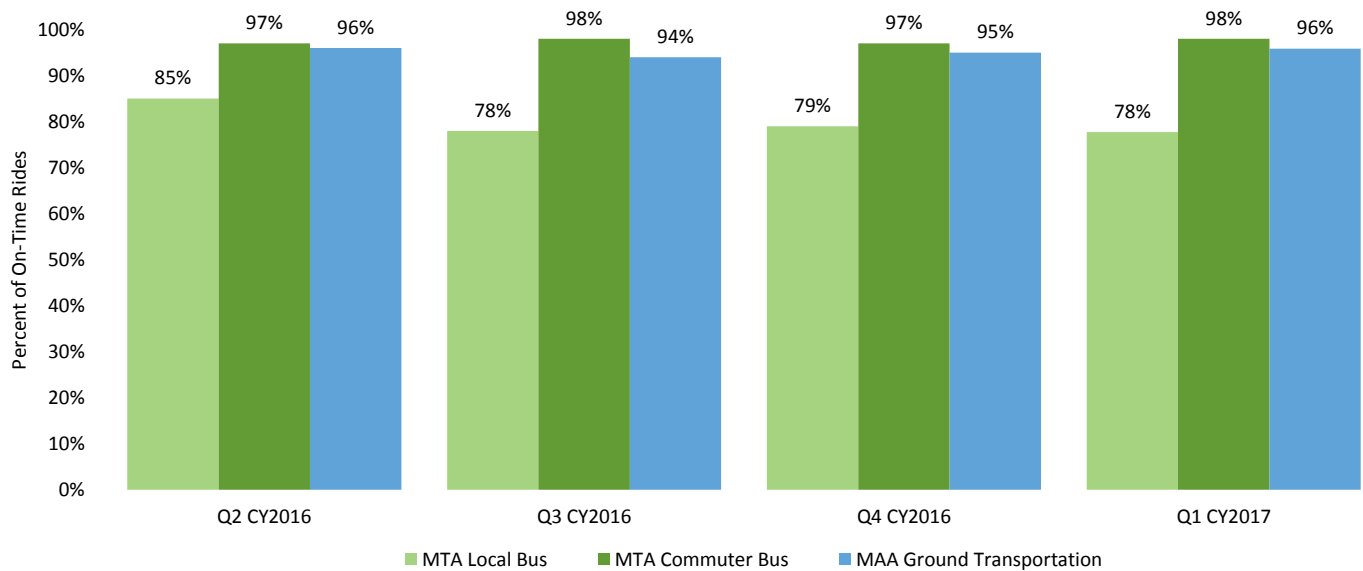
The BaltimoreLink system implementation was effective Sunday, June 18, 2017. The 3rd Quarter of CY 2017 (July 1 – September 30) will be the first reporting of BaltimoreLink system results. The system design is easier to manage when faced with the challenges of delivering urban mass transit while simultaneously being more user friendly, enhancing the profile of public transit by providing safe, efficient, reliable transit throughout the region while delivering world class customer service.

Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.1D

Reliability of the Transportation Experience: On-Time Performance (MTA & MAA)

Chart 5.1D.1: On-Time Performance of MTA Local Bus, MTA Commuter Bus, & MAA Ground Transport CY2016-CY2017



Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.1D

Reliability of the Transportation Experience: On-Time Performance (MTA & MAA)

Chart 5.1D.2: On-Time Performance of MTA Light Rail, Metro Subway, & MARC Train CY2016-CY2017

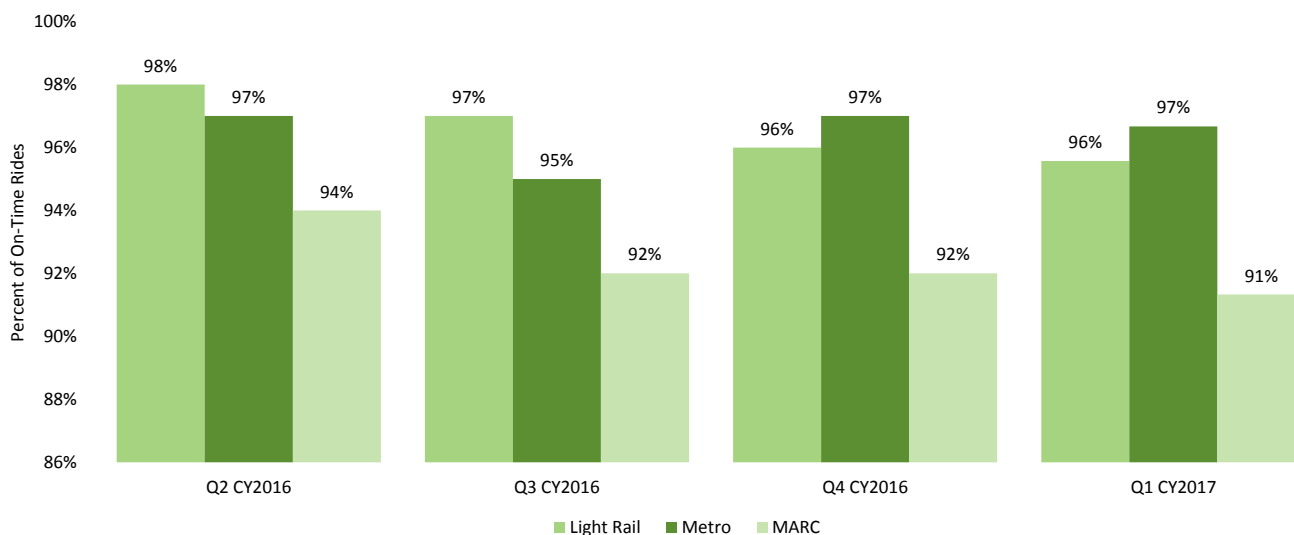
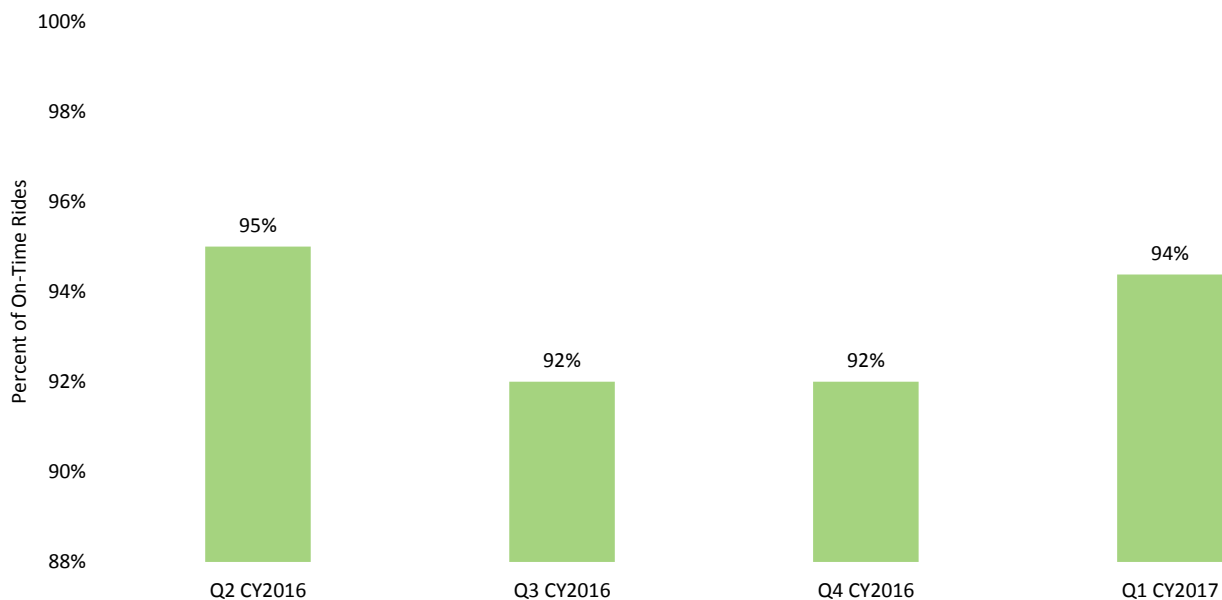


Chart 5.1D.3: On-Time Performance of MTA Paratransit CY2016-CY2017



Provide an Efficient, Well-Connected Transportation Experience

TANGIBLE RESULT DRIVER:

Phil Sullivan
Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Roxane Y. Mukai
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To provide customers with a gauge by which to assess travel time reliability on the State's highway system.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Formula based.

NATIONAL BENCHMARK:

A Planning Time Index (PTI) which is ≤ 1.5 .

PERFORMANCE MEASURE 5.1E

Reliability of the Transportation Experience: Planning Time Index for Highway Travel

Customers want reliable travel times when traveling on Maryland's highway system. The planning time index (PTI) is a metric that gauges the reliability of travel times on heavily used freeways and expressways during peak congestion.

For example, if a trip during uncongested, free-flowing traffic conditions takes a traveler 15 minutes; a PTI of 2.0 would indicate that the same trip during a heavily congested period could be expected to take up to 30 minutes. MDOT uses the following PTI ranges to describe the varying degrees of travel time reliability:

PTI < 1.5 = Reliable
 $1.5 < \text{PTI} < 2.5$ = Moderately Unreliable
PTI > 2.5 = Extremely Unreliable

In 2015, travel time on 8 percent (AM Peak) to 14 percent (PM Peak) of the freeways and expressways was assessed as "extremely unreliable" during congested periods on an average weekday. Almost all of the freeway and expressway segments that are "extremely unreliable" during congested periods are in the Baltimore-Washington region.

When compared to 2014, the 2015 travel reliability results were mixed. Continued economic recovery led to an increase of 1.6 percent in VMT above 2014, with a very slight decrease (two miles) in roadway miles that experienced "extremely unreliable" conditions during the AM Peak and an additional 21 miles of freeway/expressway that experienced "extremely unreliable" travel conditions during the PM Peak.

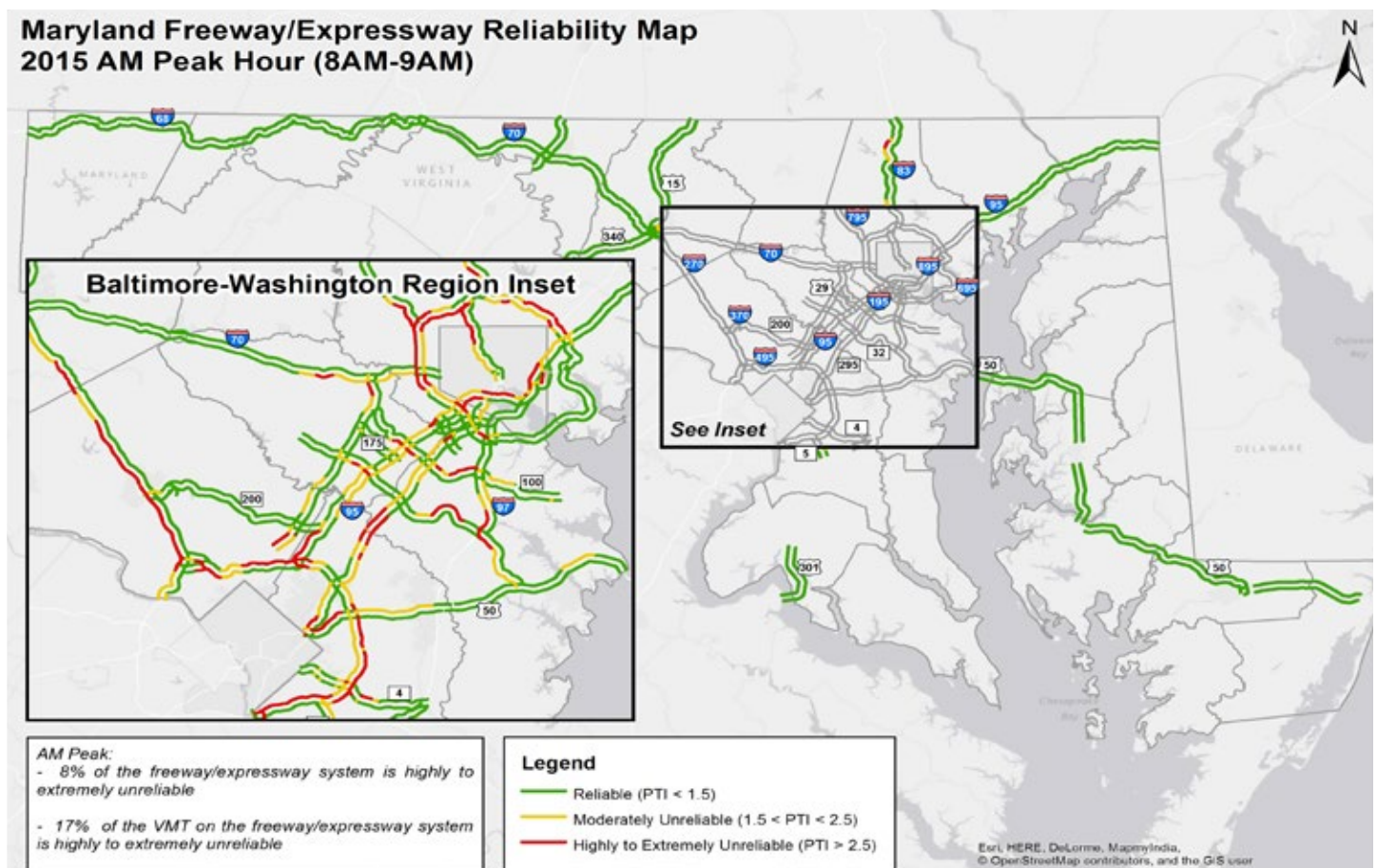
Changes to the PTI that result from completed highway projects are reflected in the PTI analysis over time. As an example, the I-95 Express Toll Lane project in Baltimore opened in December 2014. The 2015 PTI analysis found that the I-95 SB PTI in the AM peak was reduced from 2.60 to 1.44 and the I-95 NB PTI in the PM peak was reduced from 2.79 to 1.18. The I-95 Express Toll lane project area is now assessed as a "reliable" freeway segment.

Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.1E

Planning Time Index for Highway Travel

When compared to 2014, the AM Peak reflects a 1 percent increase in VMT and a 1 percent decrease in the number of freeway and expressway miles with a PTI > 2.5.



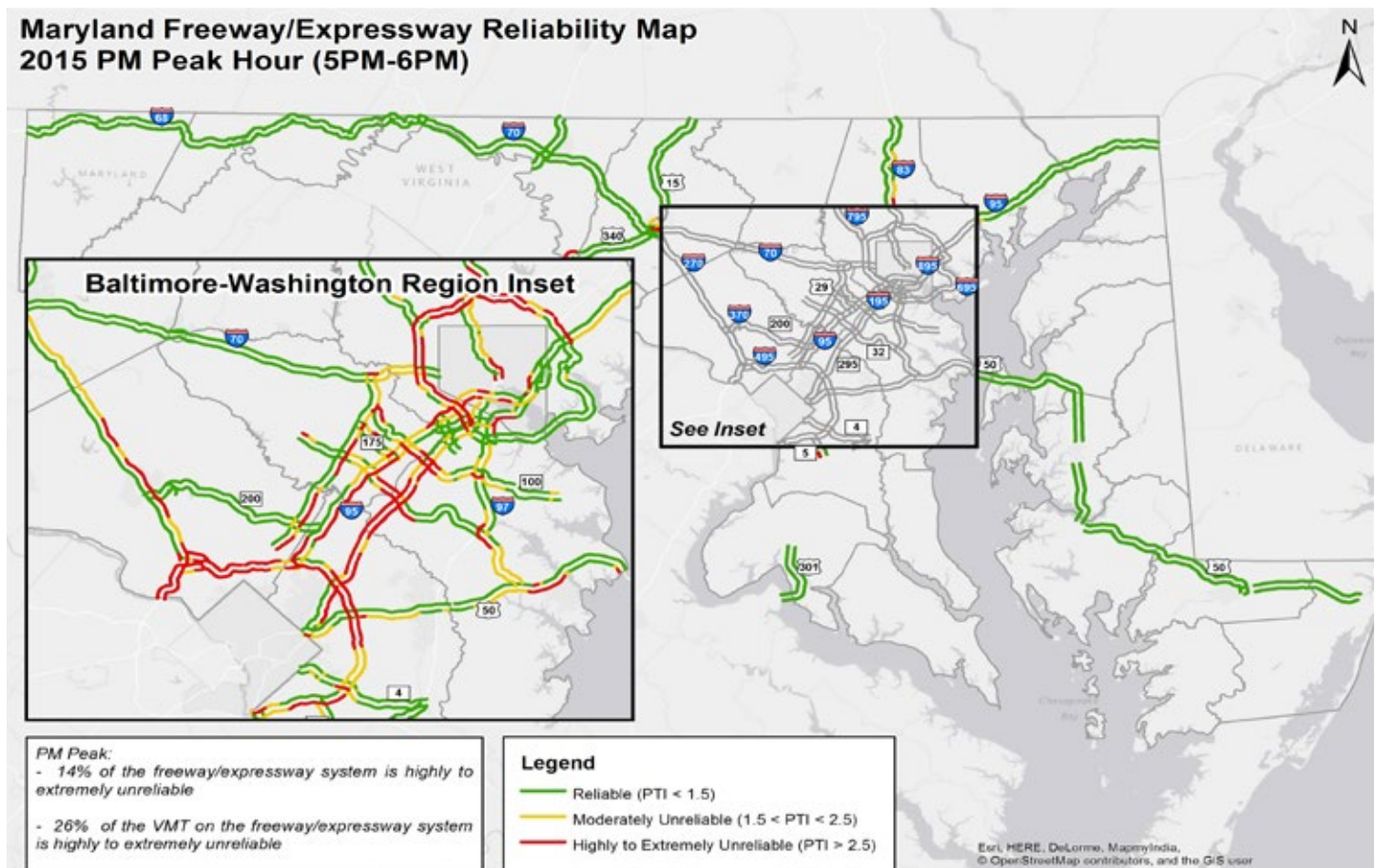
Source: 2016 Maryland State Highway Mobility Report

Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.1E

Planning Time Index for Highway Travel

When compared to 2014, the PM Peak reflects a 3 percent increase in VMT and a 1 percent increase in the number of freeway and expressway miles with a PTI > 2.5.



Source: 2016 Maryland State Highway Mobility Report

Provide an Efficient, Well-Connected Transportation Experience

TANGIBLE RESULT DRIVER:

Phil Sullivan

Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Glenn McLaughlin

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To understand the impact on efficiency of quickly restoring transportation services after incidents for customers.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

The methodology involves an analysis of operational records collected in real-time, and results are contingent on the scale, number and types of incidents causing disruptions.

NATIONAL BENCHMARK:

Arizona – 32 minutes

North Carolina – 69 minutes

Connecticut – 45 minutes

Iowa – 56 minutes

Michigan – 54 minutes

Minnesota – 35 minutes

Missouri – 24 minutes

New Jersey – 43 minutes

Virginia – 32 minutes

PERFORMANCE MEASURE 5.2A

Restoring Transportation Services: Average Time to Restore Normal Operations After Disruptions

MDOT's customers expect a safe, well-maintained, efficient and reliable transportation system with minimal disruption to travel. Rapid response to effectively manage and clear incidents that disrupt highway travel is one strategy that is essential in meeting these expectations. Efforts to improve coordination and cooperation among TBUs and emergency responders facilitate the reduction in response times and the overall average incident duration, restoring travel more quickly for customers. The "average incident duration" is a measure of the time it takes a response unit to arrive, plus the elapsed time between the arrival of the first unit and the time stamp in the CHART advanced traffic management system denoting the restoration of normal operating conditions.

As shown in chart 5.2A.1, the average incident duration between years 2010 and 2015 has been consistently less than 30 minutes. The slight increase in average incident duration in 2014 (23.32 min.) and 2015 (23.54 min.) is likely due to the addition of overnight and weekend patrol hours. During the night and weekends, incident clearance takes slightly longer, since emergency responding agencies operate at reduced staffing levels, or depend on "on-call" staff. However, performance measures show that night and weekend patrols have a significant positive impact on reducing overall travel delays.

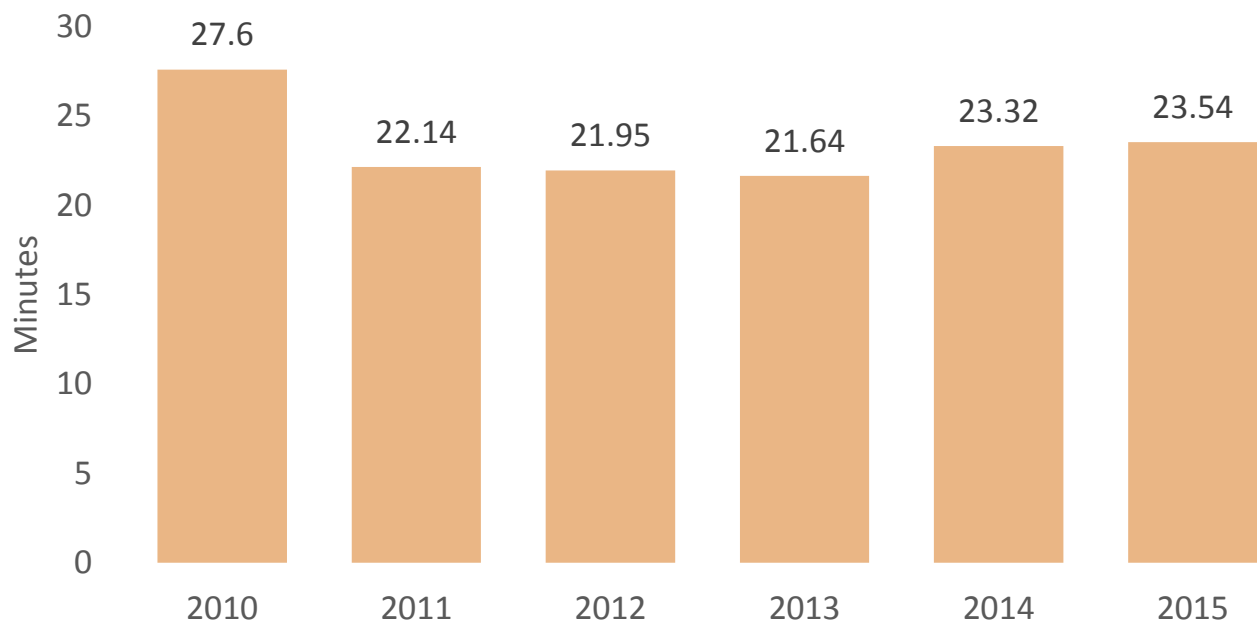
The primary strategies for improving Transportation Incident Management focus on assuring that emergency responders have well established coordination procedures, effective communications, thorough training and the resources available to address any type of incident. MDOT is leading three initiatives to improve coordination with the Maryland State Police (MSP) including; formalizing working relationships with the heavy tow industry through MSP managed agreements which may include performance incentives for prompt vehicle recovery; organizational modifications to better support inter-agency coordination between MSP and MDOT; and enhancing data collection on reported crashes, including the identification of preventable secondary incidents. MDOT is also supporting the deployment of the Maryland First radio system statewide to improve inter-agency emergency communication. And, MDOT is leading efforts to provide standardized incident management training to raise the level of emergency preparedness and safety of emergency responders who manage incidents on the transportation system.

Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.2A

Restoring Transportation Services: Average Time to Restore Normal Operations After Disruptions

Chart 5.2A.1: Average Highway (SHA and MDTA) Incident Duration FY2010-FY2015



Provide an Efficient, Well-Connected Transportation Experience

TANGIBLE RESULT DRIVER:

Phil Sullivan

Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Glenn McLaughlin

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To understand the impact on efficiency of quickly restoring transportation services after weather events.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

The methodology involves an analysis of operational records collected in real-time, and results are contingent on the scale, number and types of weather events.

NATIONAL BENCHMARK:

Minnesota – 3 hours

Washington, DC – 18 hours

Missouri – 3.8 hours

PERFORMANCE MEASURE 5.2B

Restoring Transportation Services: Average Time to Restore Normal Operations After a Weather Event

Disruptions in travel due to inclement weather (snow, ice, etc.) require specialized operations experience and rapid response to restore normal operating conditions. To understand performance during winter storms, MDOT collects data on the “average time to restore normal operations after weather events.” This measure is calculated by identifying the lapse in time from the ending of frozen precipitation in a maintenance shop’s area of responsibility and achieving bare (wet or dry) pavement conditions.

As shown in chart 5.2B.1, the average time to restore normal operations after weather events for the years 2011 through 2015 was consistently less than the benchmark value (3.8 hours –Missouri). The Average Time to Restore Normal Operations after a Weather Event increased to 6 hours in Fiscal Year 2016, mostly due to the impacts of Winter Storm Jonas which involved more than 24 inches of snow accumulation, over the period of January 22-24, 2016.

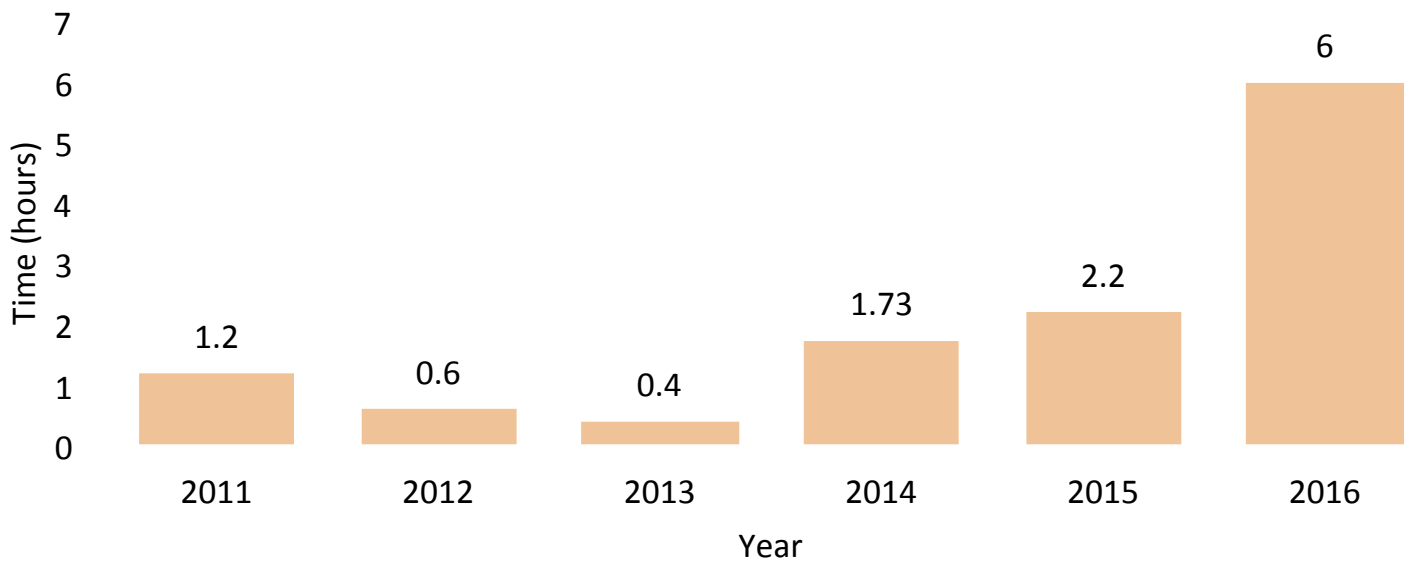
Recognizing that a large winter event such as Jonas presented unique challenges, MDOT initiated a major after-action initiative, which identified 30 tasks for improving Maryland’s winter storm preparedness. Some of the major tasks included; compiling and maintaining winter storm emergency contact lists; updating emergency procurement procedures for obtaining necessary resources (e.g. food, lodging and supplies) during major weather events; developing the capability of displaying automated emergency weather warning on programmable highway message signs; identifying resources for transporting personnel during heavy snow conditions; and documenting and distributing lists of “pre-identified” snow disposal areas. All tasks were accomplished between February and October 2016. Another major strategy was to incorporate contracts for private, heavy-tow services under the emergency snow removal procurement regulations. These services are used to recover and relocate trucks stranded in the snow from travel lanes, to maintain a clear roadway and facilitate overall snow removal efforts.

Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.2B

Restoring Transportation Services: Average Time to Restore Normal Operations After a Weather Event

Chart 5.2B.1: SHA Time to Regain Bare Pavement After Snow (hours) FY2011-FY2016



Provide an Efficient, Well-Connected Transportation Experience

TANGIBLE RESULT DRIVER:

Phil Sullivan

Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Negash Assefa

Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To measure percentage of services through alternate methods other than in-person visit as an indicator of easy and reliable access to MDOT services and products.

FREQUENCY:

Semi-Annually (in April and October)

DATA COLLECTION METHODOLOGY:

Formula accounts for total customer transportation services and products compared to those acquired by alternate methods.

NATIONAL BENCHMARK:

FY2018 - 68%

PERFORMANCE MEASURE 5.3

Percent of Transportation Services and Products Provided Through Alternative Service Delivery (ASD) Methods

MDOT customers want easy and reliable access to acquire transportation services and products. According to a 2015 Pew Research Center study, 42 percent of Americans use the internet to get government services and/or information and 22 percent use the internet to make or receive payments. In general, it is anticipated that 68 percent of MDOT customers will use alternate methods to access services and goods.

Presently, SHA, MDTA, MTA, TSO and MVA provide transportation related services and products to customers through alternative service delivery (ASD) methods such as web, kiosk, call center/interactive voice response (IVR) and mail-in. MAA and MPA have mid-term projects in the planning stages to offer pre-pay parking options to airport and cruise terminal customers.

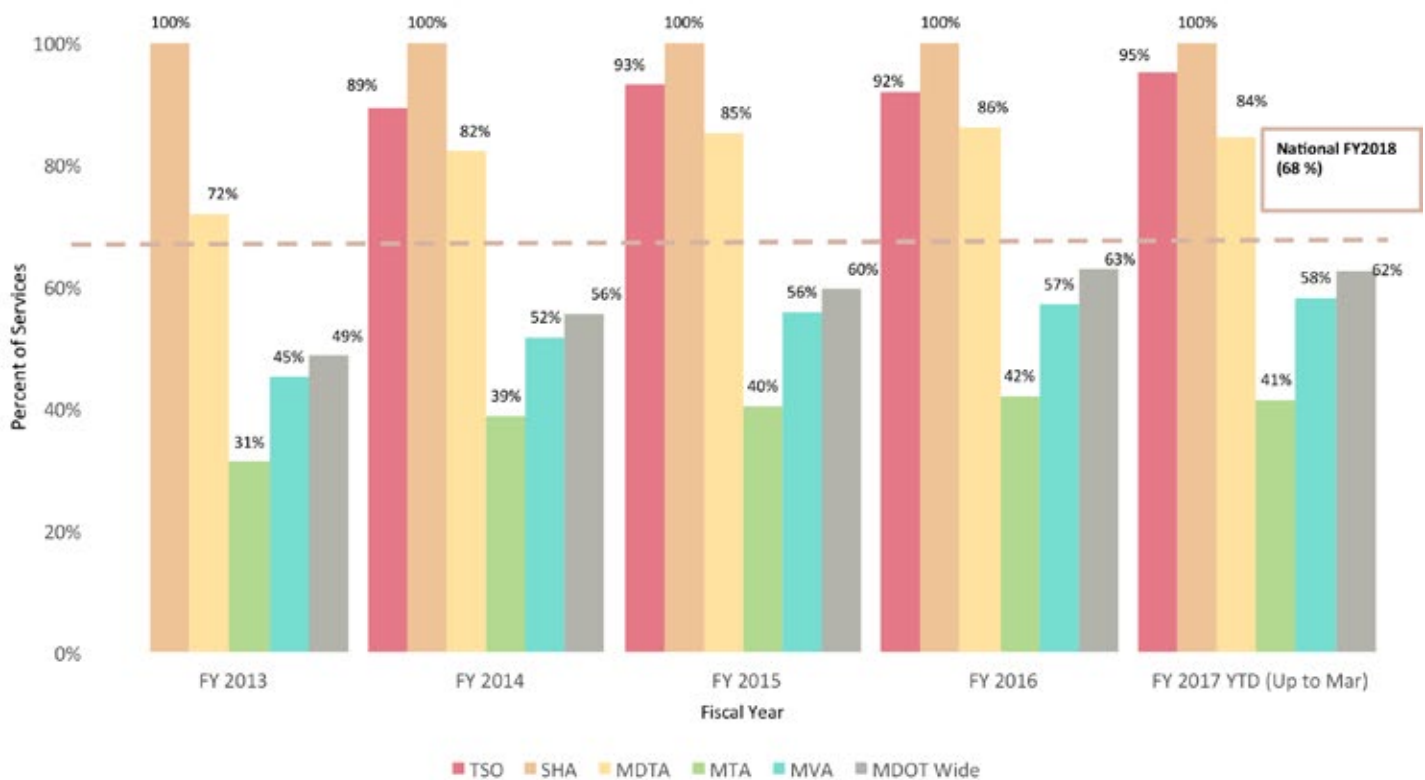
For the past three Quarters in FY 2017 (July 2016 – March 2017) SHA maintained 100 percent; MDTA achieved 85 percent; MTA realized 41 percent, TSO achieved 95 percent and MVA achieved 58 percent of total eligible services and products via alternate methods. Combined, these TBUs achieved an ASD rate of 62 percent working toward the FY 2018 goal set at 68 percent.

Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.3

Percent of Transportation Services and Products Provided Through Alternative Service Delivery (ASD) Methods

Chart 5.3.1: Percent of Alternative Service Delivery by TBU FY2013-FY2017 YTD



Provide an Efficient, Well-Connected Transportation Experience

TANGIBLE RESULT DRIVER:

Phil Sullivan

Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:

Ralign T. Wells

Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To assess the functionality and value of real-time signage and information systems offered.

FREQUENCY:

Quarterly for functionality.

Annually for customer satisfaction (in July).

DATA COLLECTION METHODOLOGY:

Sampling of real-time signage or IVR systems to determine a percentage of functionality.

Survey users to assess their opinion of usefulness and satisfaction with Real-Time Information Systems.

NATIONAL BENCHMARK:

85%-90% functionality (according to Clever Devices, a private consulting firm specializing in public transportation real-time information technologies)

PERFORMANCE MEASURE 5.4A AND 5.4B

Percent of Functional Real-Time Information Systems Provided; Customer Satisfaction with the Usefulness & Accuracy of Real-Time Information

MDOT's customers benefit from "real-time" information systems installed throughout the transportation network offering travelers the most accurate and up to date information available. These systems help customers prepare for and manage their time while using statewide transportation services.

Combined, all TBUs exceed industry standards of 90 percent functionality, averaging 99 percent functionality for Q1 of Calendar Year 2017.




























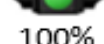


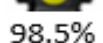
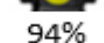
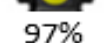

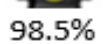
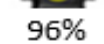
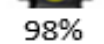
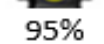
Currently, all TBUs have processes in place to ensure that any system failures are immediately addressed to ensure near 100 percent functionality at any given time. Systems will continually be monitored to ensure continued stellar "up-time" performance of these systems.

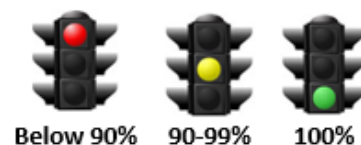
Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.4A AND 5.4B

Percent of Functional Real-Time Information Systems Provided; Customer Satisfaction with the Usefulness & Accuracy of Real-Time Information

Table 5.4A.1: Percent of Functional Real-Time Information Systems Provided for Q2 CY 2016 – Q1 CY 2017

	Q2 CY16	Q3 CY16	Q4 CY16	Q1 CY 17
SHA CHART Highway Signage	 100%	 97.5%	 100%	 98.71%
MDTA CHART Highway Signage	 100%	 100%	 98.5%	 98%
MVA Wait Time Prediction	 100%	 100%	 100%	 100%
MAA Next Vehicle Arrival Signage	NO DATA	 92.5%	 96.5%	 98%
MAA Flight Information Displays	NO DATA	 100%	 100%	 100%
MTA LIGHT RAIL Next Train Signage	 100%	 100%	 100%	 95%
MTA MOBILITY Trapeze System	 100%	 100%	 100%	 100%
MTA BUS TRACKER	 100%	 100%	 100%	 100%
MTA MARC Next Train Signage	 98.5%	 94%	 97%	 98.5%
MTA Next Vehicle Arrival (Mondawmin)	 98.5%	 96%	 98%	 95%
	Q2 CY16	Q3 CY16	Q4 CY16	Q1 CY 17



Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.4A AND 5.4B

Percent of Functional Real-Time Information Systems Provided; Customer Satisfaction with the Usefulness & Accuracy of Real-Time Information

Table 5.4B.1: MTA Customer Satisfaction with Accuracy of Real-Time Information Systems CY2017

	Very Satisfied/Satisfied	Not Very/Not at All Satisfied
MTA Bus	19% / 40% = 59%	23% / 17% = 40%
MTA Metro Subway	14% / 55% = 69%	17% / 10% = 27%
Light Rail	28% / 50% = 78%	13% / 10% = 23%
MARC Train	22% / 45% = 67%	25% / 8% = 33%
Commuter Bus	30% / 44% = 74%	16% / 10% = 26%

Table 5.4B.2 MTA Customer Satisfaction with the helpfulness of Real-Time Information Systems CY2017

	Very Satisfied/Satisfied	Not Very/Not at All Satisfied
MTA Bus	23% / 45% = 68%	18% / 14% = 32%
MTA Metro Subway	23% / 50% = 73%	18% / 6% = 24%
Light Rail	33% / 50% = 83%	10% / 7% = 17%
MARC Train	23% / 50% = 73%	21% / 6% = 27%
Commuter Bus	40% / 46% = 86%	9% / 5% = 14%

Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE 5.4A AND 5.4B

Percent of Functional Real-Time Information Systems Provided; Customer Satisfaction with the Usefulness & Accuracy of Real-Time Information

Table 5.4B.3: MVA Customer Satisfaction with Helpfulness and Accuracy of Wait-Time System CY2017

	Satisfied	Not Satisfied
Satisfaction with the helpfulness of wait time information	79%	21%
Satisfaction with the accuracy of wait time information	75%	25%

Table 5.4B.4: MAA Customer Satisfaction with Helpfulness and Accuracy of Shuttle Arrival CY2017

	Satisfied	Not Satisfied
Satisfaction with the helpfulness of wait time information	84%	16%
Satisfaction with the accuracy of wait time information	79%	21%

Table 5.4B.5: SHA Customer Satisfaction with Accuracy and Usefulness of Real-Time Information Systems CY2017

	Very Accurate/Somewhat Accurate	Not at all Accurate
Accuracy of Real-Time Information Systems	54% / 41% = 95%	4%
Usefulness of Real-Time Information Systems	57% / 35% = 92%	6%

TANGIBLE RESULT #6

Communicate Effectively With Our Customers



Every MDOT employee has to communicate with customers, some on a daily basis. It is critical to communicate clearly, concisely, timely and accurately with customers.

RESULT DRIVER:

Diane Langhorne

The Secretary's Office (TSO)

Communicate Effectively With Our Customers

TANGIBLE RESULT DRIVER:

Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Katie Bennett
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To examine and analyze the social media activities of each MDOT TBU to gauge the effectiveness of communication with customers/followers.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

MDOT gathers social media analytics for this measure from MDOT Twitter and Facebook accounts.

NATIONAL BENCHMARK:

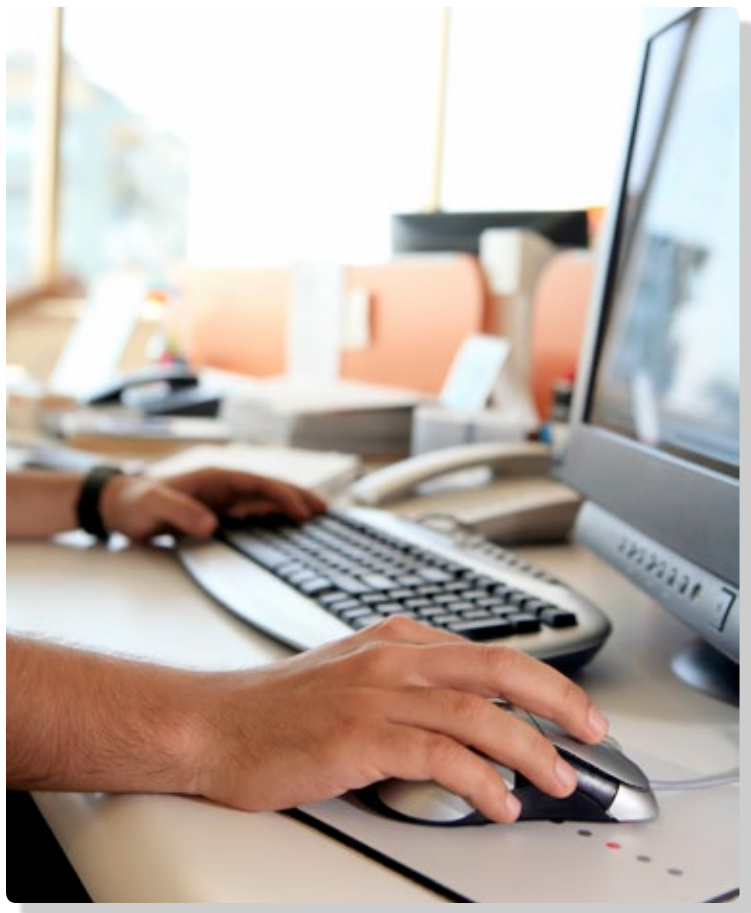
N/A

PERFORMANCE MEASURE 6.1A

Communicate Effectively Utilizing Social Media: Social Reach

Social media has become a standard method for businesses to communicate with their customers. MDOT uses social media channels to disburse clear and accurate information to their customers and the media in a timely manner.

“Social Reach” measures the number of customers who have seen MDOT messages on Facebook and Twitter. MDOT strives to reach customers through the channels they use. Efforts are focused on developing social media strategic skills and programs MDOT-wide to enhance social reach. To date, MDOT proudly has nearly 290,000 fans on social media which continues to grow by 3 percent each month.



Communicate Effectively With Our Customers

PERFORMANCE MEASURE 6.1A

Communicate Effectively Utilizing Social Media: Social Reach

Chart 6.1A.1: Total MDOT Social Media Followers CY2017

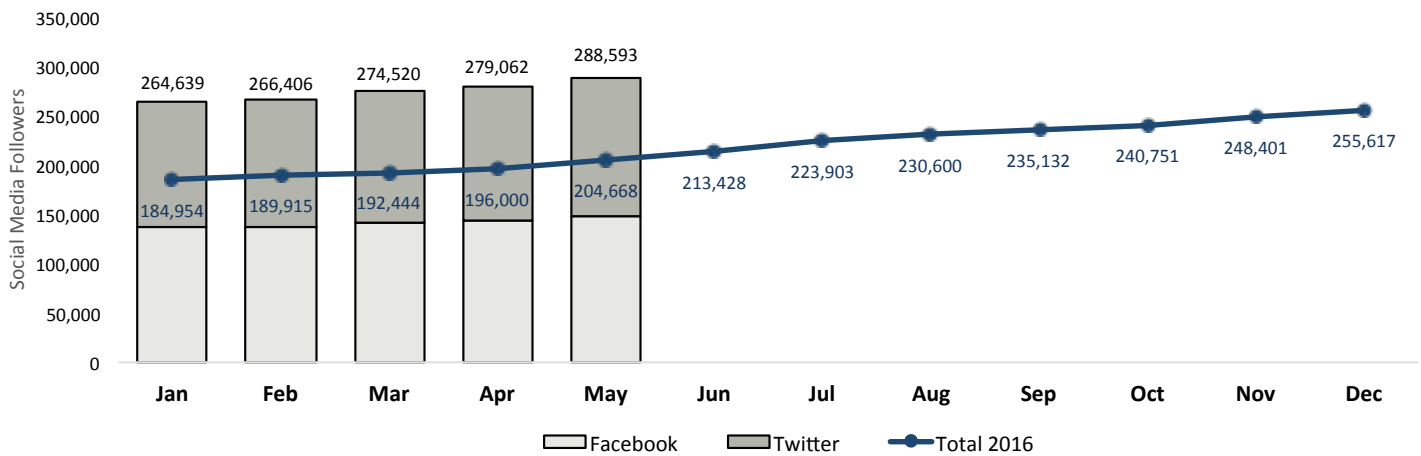
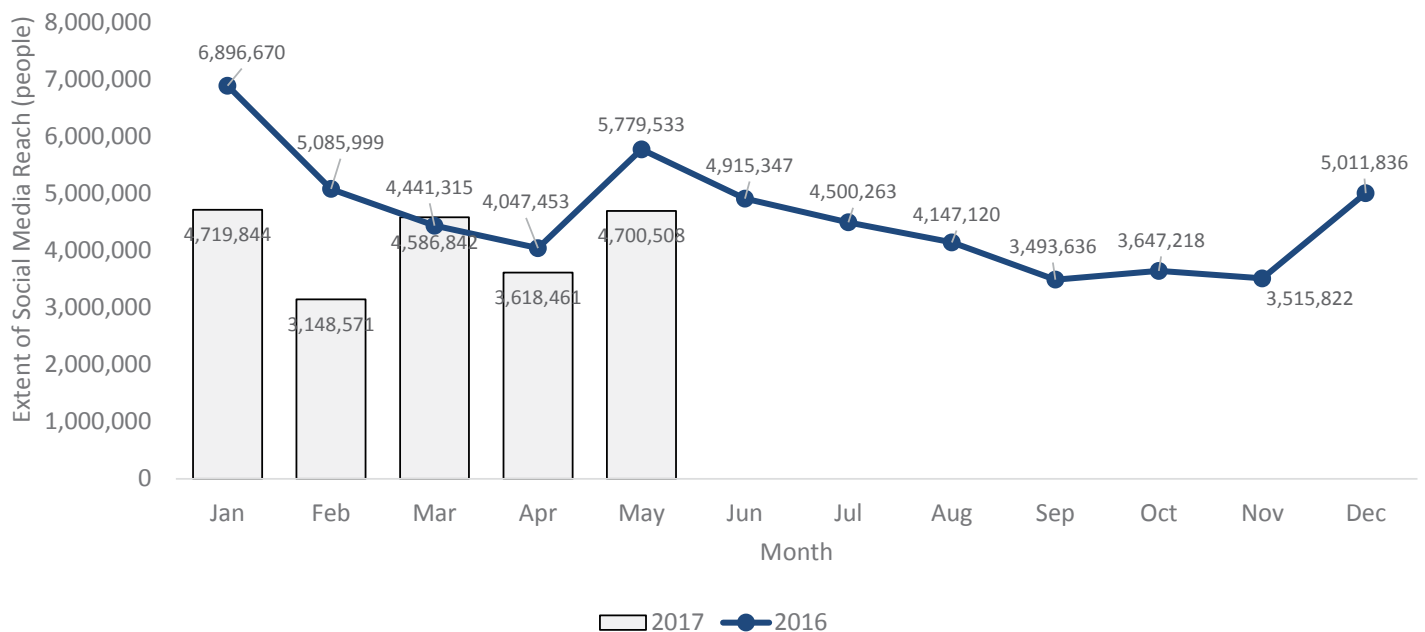


Chart 6.1A.2: Total MDOT Social Media Reach CY2017



Communicate Effectively With Our Customers



Communicate Effectively With Our Customers

TANGIBLE RESULT DRIVER:

Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Richard Scher
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To examine and analyze the social media activities of each MDOT TBU to gauge the effectiveness of customer communication.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

MDOT gathers social media analytics for this measure from all MDOT Twitter and Facebook accounts.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 6.1B

Communicate Effectively Utilizing Social Media: Social Engagement

While “social reach” measures the total number of people who have seen a message, “social engagement” recognizes how followers engaged with that message. Engagements initiate opportunities to communicate interactively with customers.

To determine the effectiveness of its social media communication, MDOT measures social engagement across all MDOT social media accounts, looking for trends in likes, comments and shares in order to better provide content to its followers. Through education and training, MDOT staff are determined to heighten the social experience of customers.

MDOT continues to learn the interests of its customers through social media channels to provide the content customers expect.

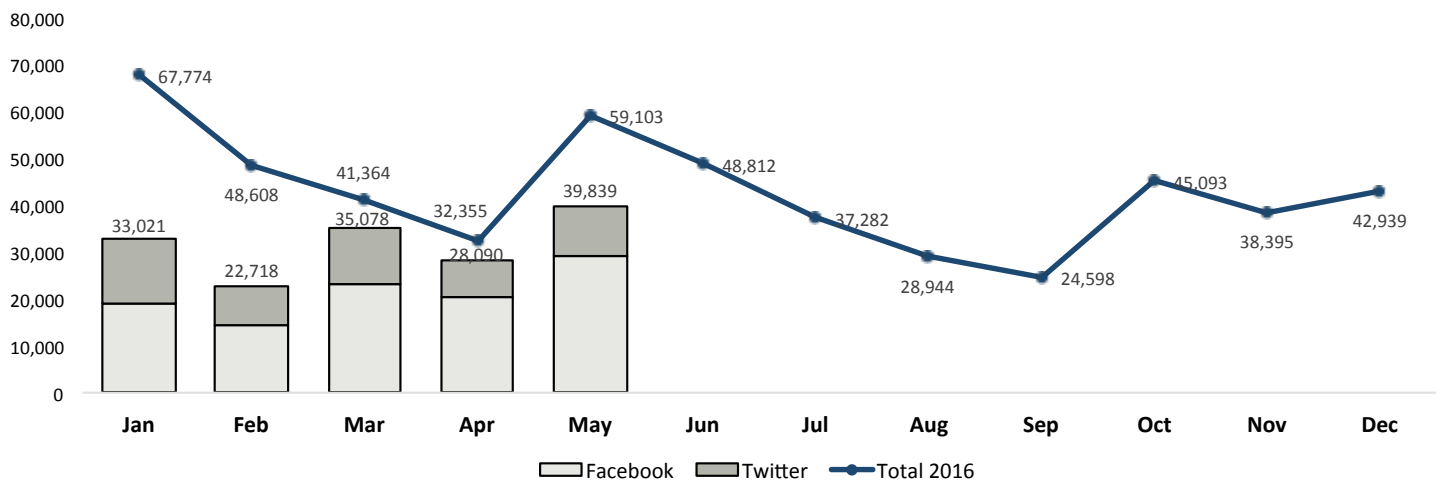


Communicate Effectively With Our Customers

PERFORMANCE MEASURE 6.1B

Communicate Effectively Utilizing Social Media: Social Engagement

Chart 6.1B.1: Total MDOT Social Media Engagements CY2017



Communicate Effectively With Our Customers

TANGIBLE RESULT DRIVER:

Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Sharon Rutzebeck
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track how clearly and effectively MDOT communicates with customers at public meetings.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data will be collected via survey at all public meetings hosted by MDOT business units. The data will be owned and housed by the business unit in charge of the public meetings and sent to MVA on a quarterly basis.

NATIONAL BENCHMARK:

84% (ASCI index)

PERFORMANCE MEASURE 6.2

Satisfaction with Communication at Public Meetings

MDOT wants to hear from its customers and encourages feedback and community interaction during its hosted public transportation meetings, hearings and workshops. Transportation projects are more successful when there is effective communication and feedback from residents, community leaders and stakeholders. MDOT strives to ensure that its transportation planners, engineers and construction professionals use language, graphics, maps and other project related materials that are relevant, detailed and easy to understand.

A standardized survey method is used by MDTA, MTA and SHA to measure and track customer perception of how clearly and effectively MDOT personnel communicated with the community. From July 2016 – June 2017, 85 percent of customers (177 customers) surveyed during 11 separate MDOT hosted events indicated they were satisfied with the received project information.

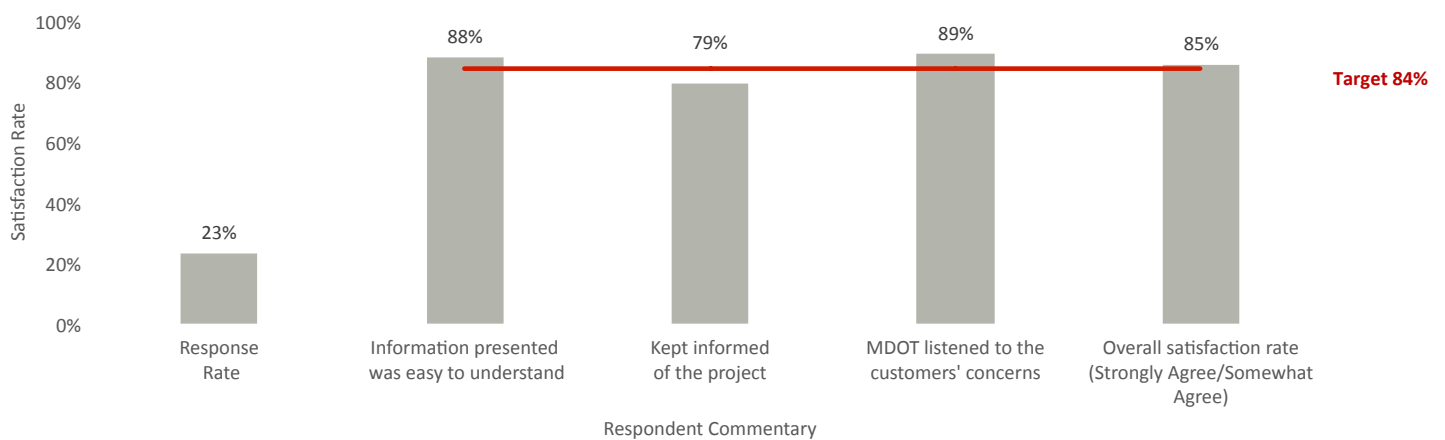
MDOT is pleased that the Department exceeds the national customer satisfaction benchmark of 84 percent, and continues to explore new opportunities and technologies to further reach customers and keep them well informed on transportation projects.

Communicate Effectively With Our Customers

PERFORMANCE MEASURE 6.2

Satisfaction with Communication at Public Meetings

**Chart 6.2.1: Overall Customer Satisfaction with Communication at Public Meetings
FY 2017 (July - June 2017)**



Communicate Effectively With Our Customers

TANGIBLE RESULT DRIVER:

Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Jonathan Dean
*Maryland Aviation Administration
(MAA)*

PURPOSE OF MEASURE:

To track number of stories generated to ensure maximum customer reach.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data can be derived through software systems.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 6.3A

Communicate Effectively Through News Releases: Number of News Stories Generated from Major Releases

TBU communications and media relations professionals work to highlight the good work performed by employees across MDOT. These public information leaders use their experience and knowledge to represent MDOT and serve as spokespersons before the news media and general public.

This performance measure encourages each MDOT TBU to monitor and analyze the news that it creates and disseminates. Each month, TBUs use a variety of methods to showcase positive aspects of MDOT services and products. Press releases remain an important tool to distribute news to Maryland residents, businesses, and visitors. This measure examines the number of press releases issued each month and the corresponding number of news stories that resulted.

The press releases created by MDOT TBUs continue to result in broad reach across local, national, international, and transportation trade media.

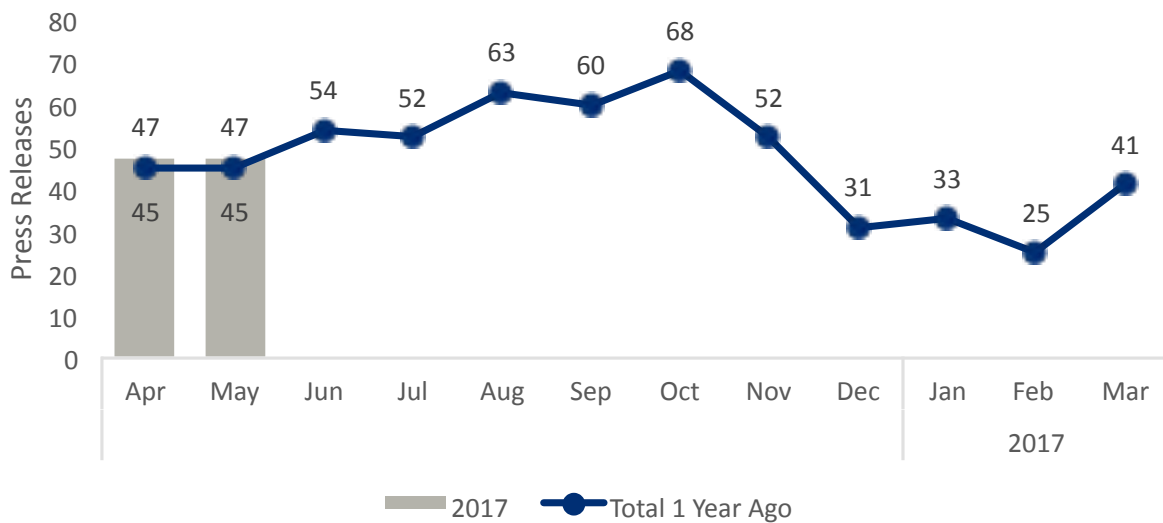


Communicate Effectively With Our Customers

PERFORMANCE MEASURE 6.3A

Communicate Effectively Through News Releases:
Number of News Stories Generated from Major Releases

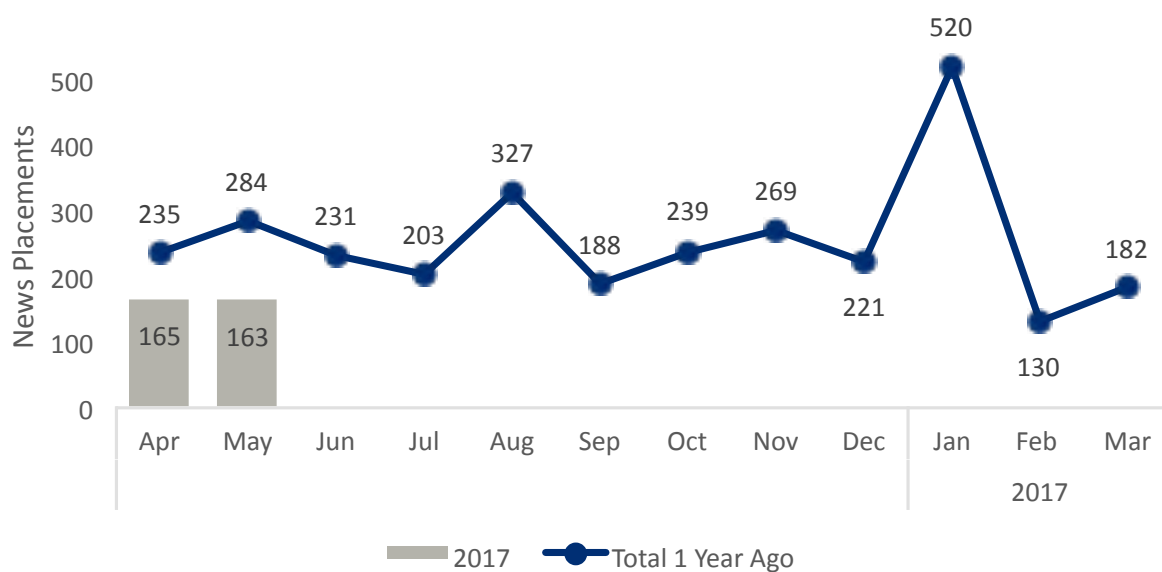
Chart 6.3A.1: MDOT Press Releases April-May 2017



PERFORMANCE MEASURE 6.3A

Communicate Effectively Through News Releases: Number of News Stories Generated from Major Releases

Chart 6.3A.2: MDOT News Placements April-May 2017



Communicate Effectively With Our Customers

TANGIBLE RESULT DRIVER:

Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Valerie Burnette Edgar, APR
State Highway Administration (SHA)

PURPOSE OF MEASURE:

To evaluate the effectiveness of the news releases issued by MDOT. Demonstrates cost effectiveness of releasing public information to media outlets vs. buying advertising space/time.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data can be derived through software systems and some of the data is calculated per news story by individuals using advertising rates of media outlets.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 6.3B

Communicate Effectively Through News Releases: Earned Media Value of Print and Broadcast Coverage Generated by News Releases

Print and broadcast media are the industry standard for business to customer communication. To reach its customers, MDOT has the option to buy advertising space or time in the market or to issue news releases that are then used and editorialized by media outlets. The latter offers a significant cost-savings to MDOT and the tax-paying public while allowing for MDOT messages to reach more customers quickly and efficiently.

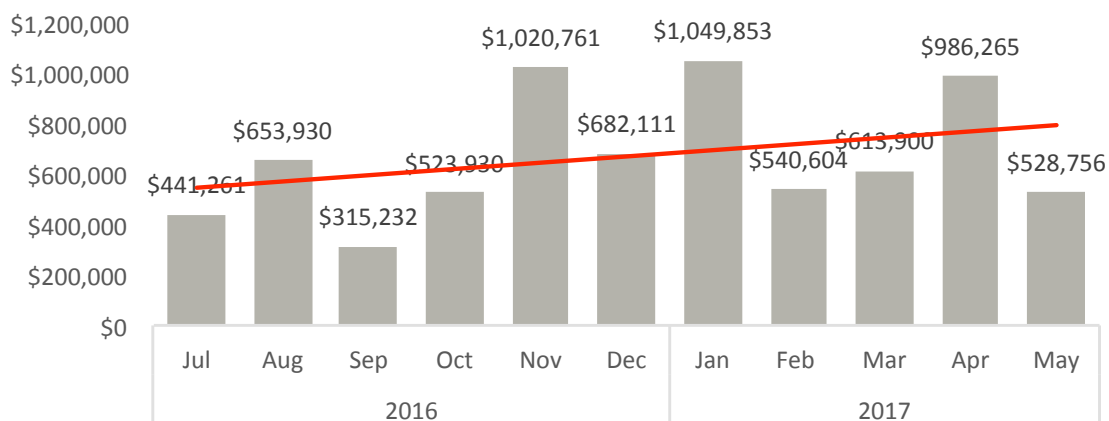
MDOT issues news releases to inform customers of important information they need regarding transportation services and projects. This measure shows the value of print and broadcast stories generated by news releases to determine the cost effectiveness of reaching customers with news and information without purchasing advertising for public notice.

Communicate Effectively With Our Customers

PERFORMANCE MEASURE 6.3B

Communicate Effectively Through News Releases: Earned Media Value of Print and Broadcast Coverage Generated by News Releases

Chart 6.3B.1: Total Earned Media Value July 2016-May 2017

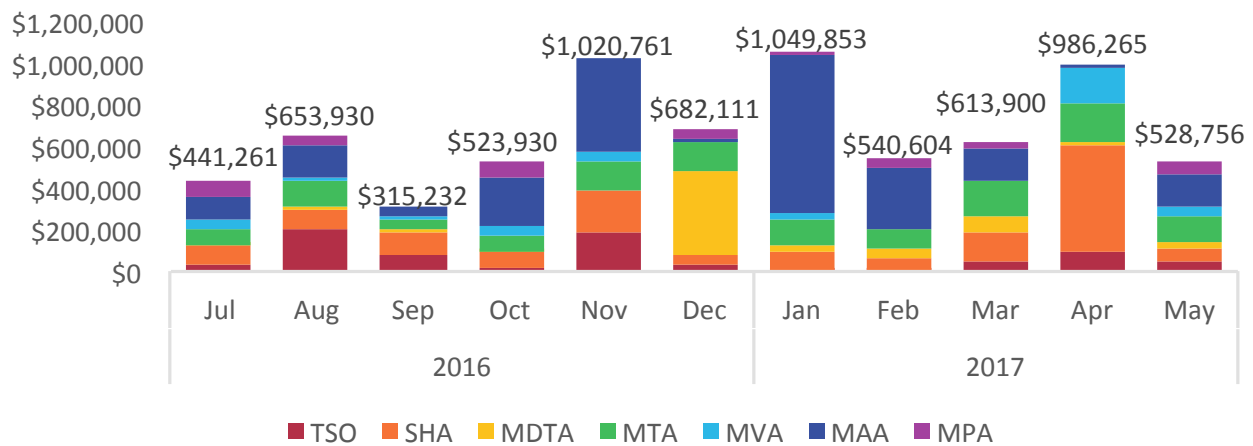


Communicate Effectively With Our Customers

PERFORMANCE MEASURE 6.3B

Communicate Effectively Through News Releases: Earned Media Value of Print and Broadcast Coverage Generated by News Releases

Chart 6.3B.2: Earned Media Value by TBU July 2016-May 2017



Communicate Effectively With Our Customers

TANGIBLE RESULT DRIVER:

Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Valerie Burnette Edgar
State Highway Administration (SHA)

PURPOSE OF MEASURE:

To evaluate the tone of media coverage resulting from news releases.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

MDOT's team will use software that tracks releases and news generated to evaluate tone of news stories.

NATIONAL BENCHMARK:

N/A

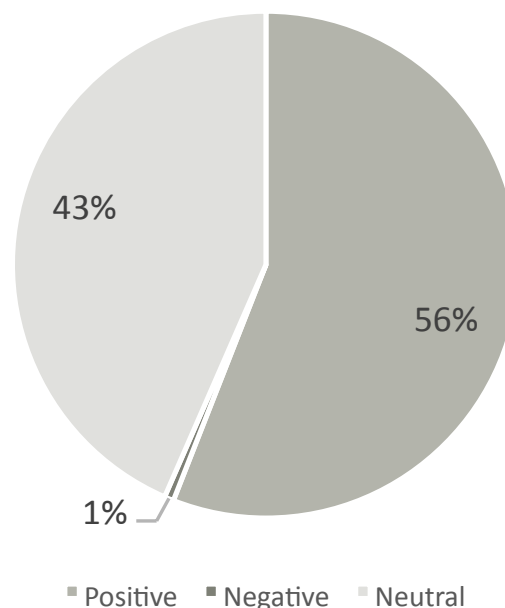
PERFORMANCE MEASURE 6.3C

Communicate Effectively Through New Releases: Evaluate Tone of News Stories by Publications Generated from MDOT Releases

MDOT has a responsibility to inform customers about important information they need relating to services, transportation options and improvements in their communities. One way MDOT shares information is through issuing news releases to the media.

This measure helps MDOT evaluate the tone of print and broadcast news stories that are directly related to MDOT news releases to determine if there is balanced coverage for customers. It also helps MDOT determine if more, less or different information is needed to ensure customers are receiving factual information via news outlets.

**Chart 6.3C.1: Overall "News Tone" MDOT-Wide
March 2017 - May 2017**

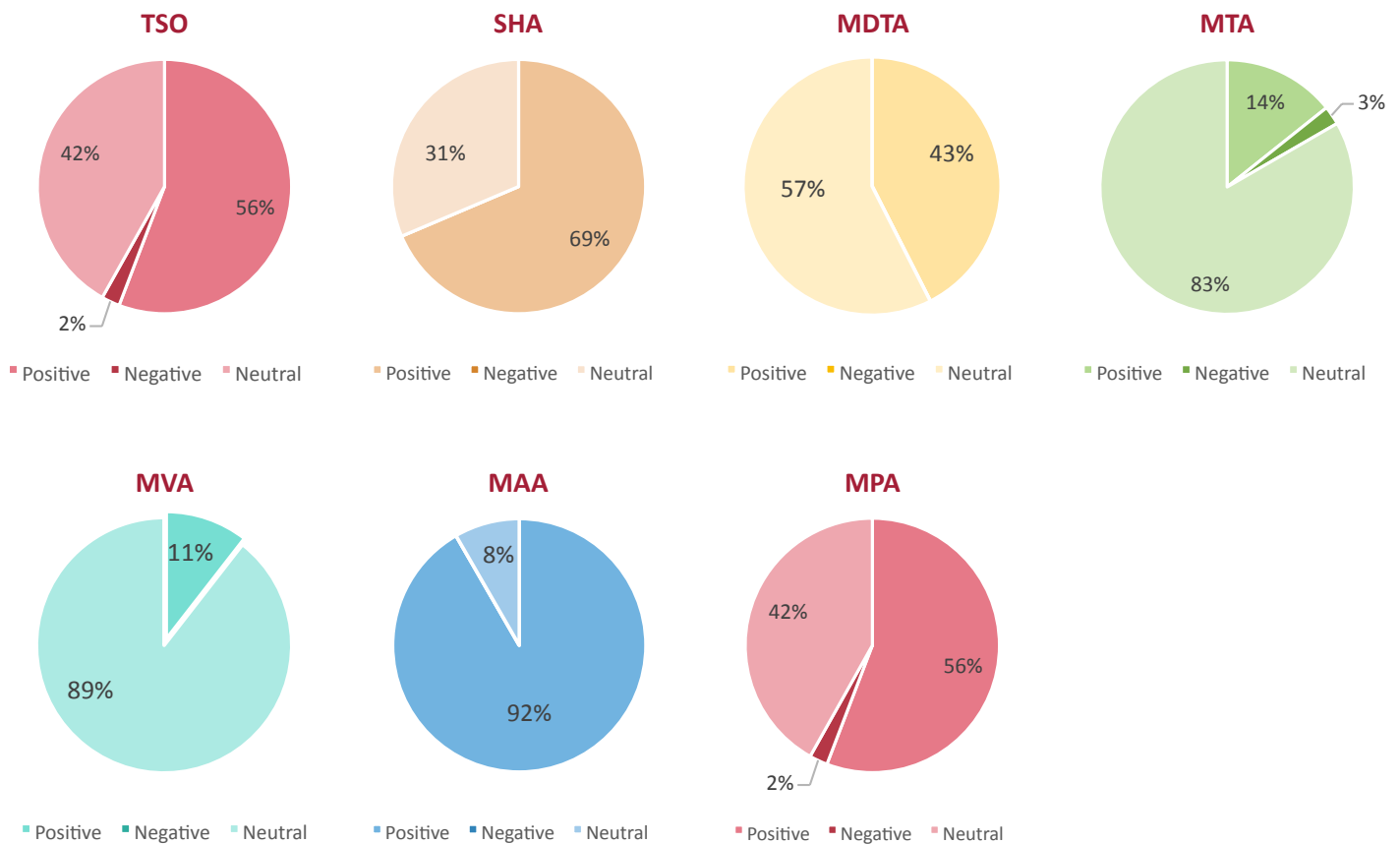


Communicate Effectively With Our Customers

PERFORMANCE MEASURE 6.3C

Communicate Effectively Through New Releases: Evaluate Tone of News Stories by Publications Generated from MDOT Releases

6.3C.1: Overall "News Tone" by TBU March 2017 - May 2017



Communicate Effectively With Our Customers

TANGIBLE RESULT DRIVER:

Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Lisa Dickerson
The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To assess effective communication via translators at public meetings.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Translated customer surveys distributed at the conclusion of each public meeting.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 6.4

Communicate Effectively to Customers with English Language Barriers at Public Meetings

Maryland Department of Transportation (MDOT) provides customers with English-language barriers several options for accessing important information:

Written Translations: Since October 2012, a total of 249 documents have been translated, with 192 of those documents translated to Spanish (see Chart 6.4.1).

On-Site Interpretations: Since October 2012, MDOT's MTA, SHA, and OMBE have utilized the DBM contract to provide customers with onsite interpretations. Of the 67 onsite interpretations, 44 were for Spanish translations. Other translations include American Sign Language, Korean, Arabic, Mandarin, and Polish (see Chart 6.4.2)

Translated Web-sites. In the first Excellerator quarter, it was reported that the Office of Diversity (ODE) posted "Vital Documents": a Notice to the Public under Title VI, Title VI Complaint Procedures and a Title VI Complaint Form. As mentioned each quarter, these documents were contactor-translated into the top 10 languages. In the past year, 434 customers viewed the web-page containing these documents.

Additionally, using a contractor, MDOT MVA's top 25 webpages (see Chart 6.4.4), MDOT MTA's entire web-site and MDOT MDTA's EZ Pass web-site are all translated into Spanish. Google Translations remains the most utilized translation option with usage on an upward trend. MDOT MVA continues to outpace all other TBUs combined with Google Translate activity.

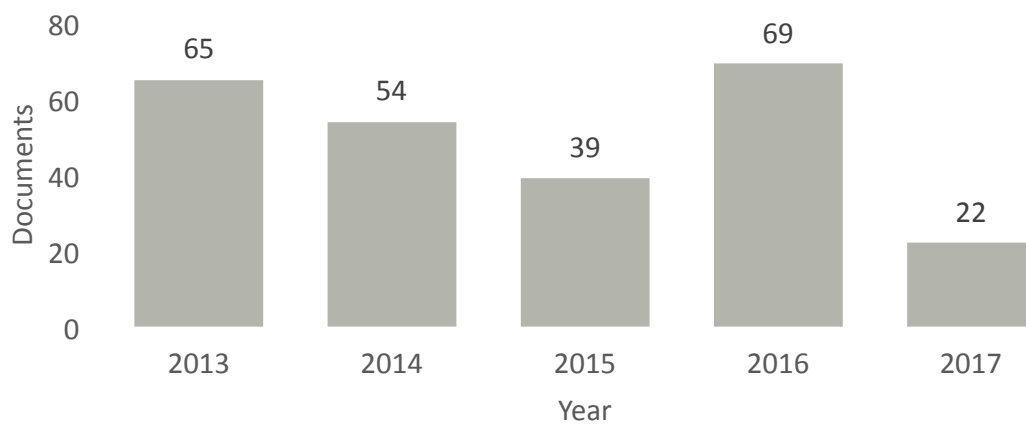
Additional recent accomplishments include launching the MDOT One Stop Shop. During MDOT One Stop Shop's first month, the Homepage was viewed 64,692 times. The new MDOT website receives an average of 16,173 views per week (see Chart 6.4.3). Google Translations was used 138 times for 28 languages with around half of those translations for Spanish.

Communicate Effectively With Our Customers

PERFORMANCE MEASURE 6.4

Communicate Effectively to Customers with English Language Barriers
at Public Meetings

Chart 6.4.1: Total Documents Translated by Schreiber MDOT-Wide CY2013-CY2017 (YTD)

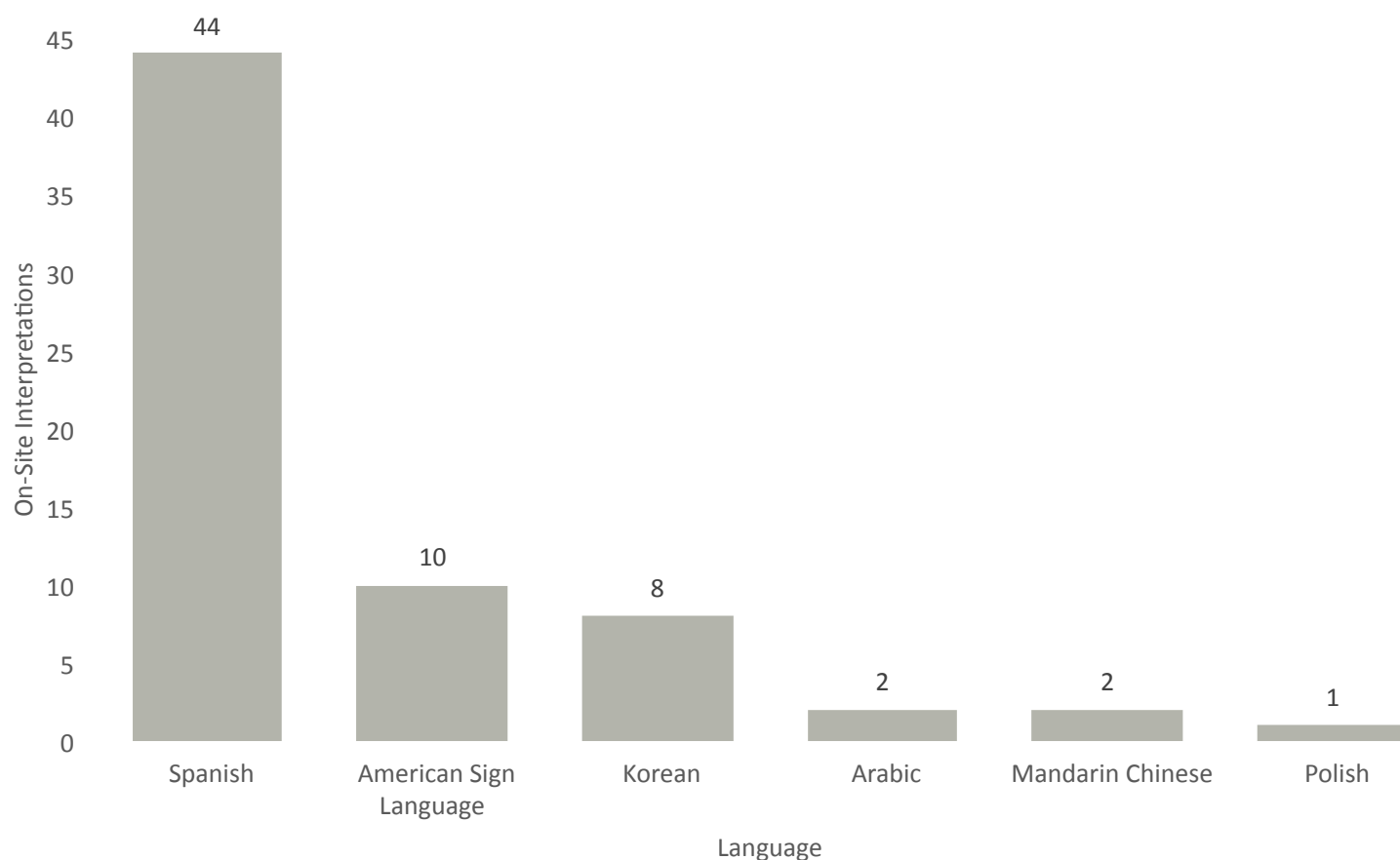


Communicate Effectively With Our Customers

PERFORMANCE MEASURE 6.4

Communicate Effectively to Customers with English Language Barriers at Public Meetings

Chart 6.4.2: On-Site Interpretations by Ad-Astra MDOT-Wide CY2013-CY2017 (YTD)



Communicate Effectively With Our Customers

PERFORMANCE MEASURE 6.4

Communicate Effectively to Customers with English Language Barriers at Public Meetings

Chart 6.4.3: MDOT One Stop Shop's Google Translate Activity vs Total Homepage Views

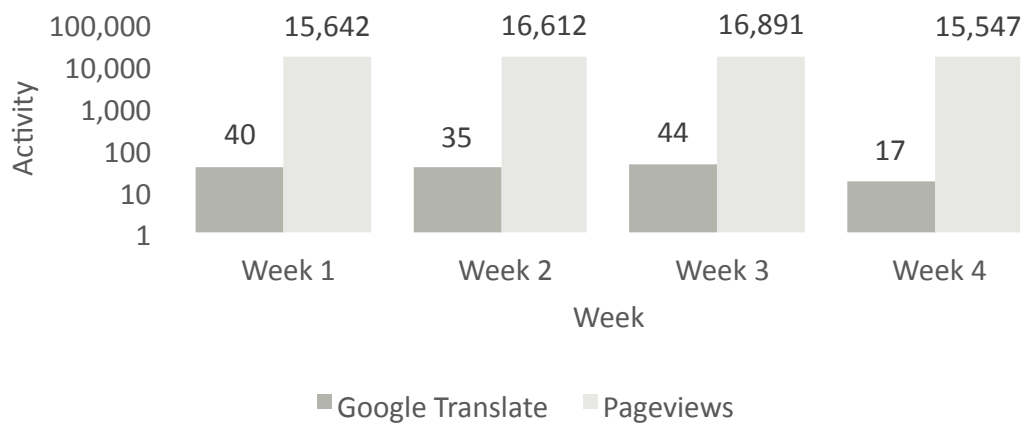
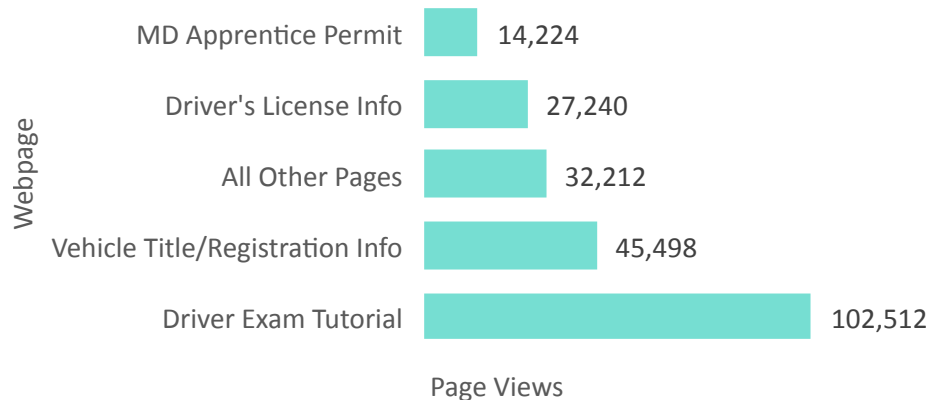


Chart 6.4.4: Pageviews on MDOT MVA's Spanish-Translated Webpages June 2016-June 2017



Communicate Effectively With Our Customers

TANGIBLE RESULT DRIVER:

Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Jonathan Dean
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To track news customers
can use 24/7.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Supported by all MDOT
Communications Directors,
measurement will include
tracking estimates of media
outlets that cover pitched
stories and the number of
pitches generated each month
from submitting news releases.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 6.5

News Customers Can Use — Proactive Media Stories

TBU communications and public affairs leaders monitor MDOT activities and identify opportunities to publicize and promote unique and positive stories for our customers. We work to develop and maintain relationships with reporters and editors across the news media.

This new performance measure highlights MDOT communicators' work to create and disseminate distinctive stories to the news media and the general public. Customer service initiatives are a major emphasis of this media outreach. For this measure, our MDOT media relations employees are encouraged to "go beyond the press release" by directly pitching positive stories to the media.

For this new measure, we have worked to establish that TBUs will identify several significant, leading media outlets. Our communicators will coordinate with these news outlets to produce stories related to customer service or new MDOT services. For each quarter, we will highlight a number of positive news stories that were the result of the expanded outreach.

Communicate Effectively With Our Customers

PERFORMANCE MEASURE 6.5

News Customers Can Use — Proactive Media Stories



“We think we should allow our customers to have access to healthy options,” says Ricky Smith, Executive Director and CEO of BWI Marshall Airport.



Communicate Effectively With Our Customers

PERFORMANCE MEASURE 6.5

News Customers Can Use — Proactive Media Stories



Arriving for the Preakness

Kentucky Derby winner Always Dreaming arrives Tuesday morning at BWI Airport, being led off the plane by Shawn Schrenk of Tex Sutton's equine air travel company.

PERFORMANCE MEASURE 6.5

News Customers Can Use — Proactive Media Stories

**BALTIMORE
STYLE**



Taking Flight | April 2017

The \$100 million expansion of BWI Marshall's international wing aims to meet the growing needs of Maryland travelers.

TANGIBLE RESULT #7

Be Fair and Reasonable to Our Partners



MDOT will provide an easy, reliable procurement experience throughout the system.

RESULT DRIVER:

Wanda Dade

State Highway Administration (SHA)

TANGIBLE RESULT DRIVER:

Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Angela Martin
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To track MBE participation achieved on contracts within MDOT.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

MDOT TBUs report the data on a quarterly basis to Governor's Office of Minority Affairs (GOMA) and MDOT. The information will be provided by MDOT from that report.

NATIONAL BENCHMARK:

N/A

The state goal/benchmark is 29 percent.

PERFORMANCE MEASURE 7.1

Percentage of Minority Business Enterprise (MBE) Participation Achieved by Each TBU

The MBE program is a statewide program to facilitate minority business participation on contracts. Each MDOT TBU tracks MBE participation data for internal program monitoring. Participation is reported on a quarterly year to date basis.

- MDOT MBE participation for FY2017 Q3 was approximately 20 percent (average of all TBUs) reflecting an increase from FY2017 Q2, which was approximately 17 percent. Participation at the TBUs ranged from 10 percent to almost 30 percent.
- MBE participation is important as MDOT is subject to the statewide MBE goal of 29 percent as are all state agencies. Participation has been up and down during the last fiscal year, but overall the participation has not been at that level.
- Per the strategic plan, input has been obtained from MDOT Procurement and Fair Practices staff regarding approaches to positively impact the goal. Unbundling of contracts, an increase in the number of smaller contracts and increased/enhanced outreach efforts are items that have been recommended that should have a positive impact.
- MDOT MBE Participation for FY 2016 was approximately 19 percent (average of all TBUs).

PERFORMANCE MEASURE 7.1

Percentage of Minority Business Enterprise (MBE) Participation Achieved by Each TBU

Chart 7.1.1: MBE Participation Rate in Awarded Contracts by TBU FY2017

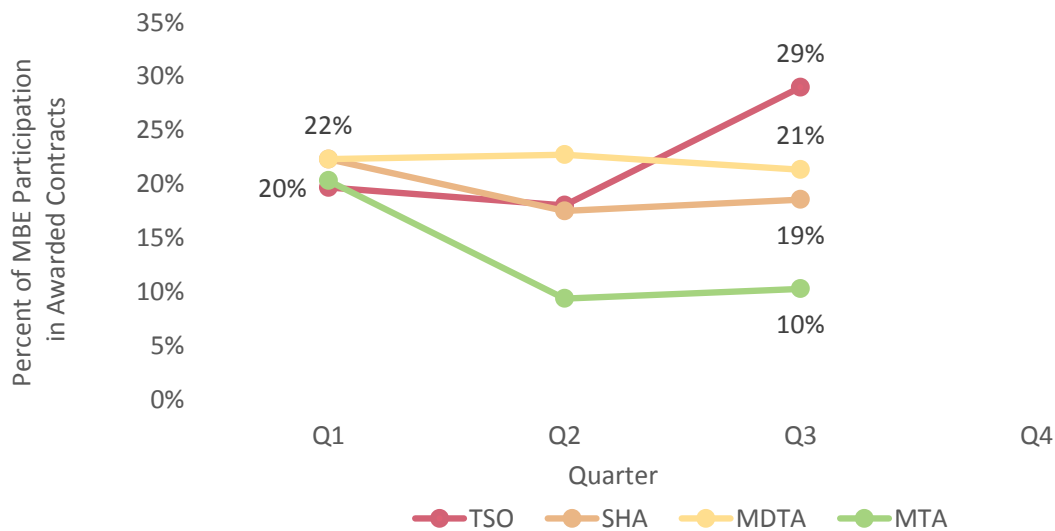
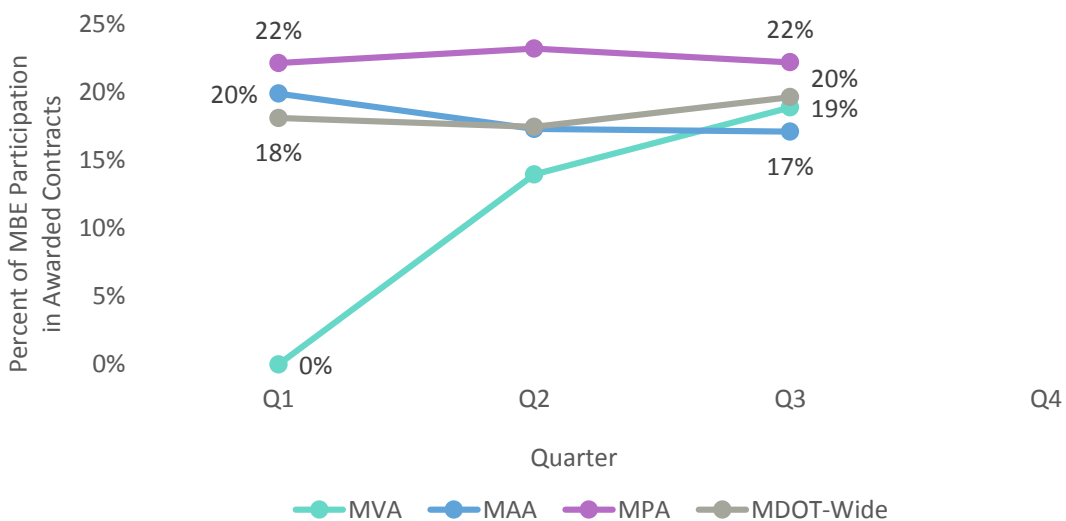


Chart 7.1.2: MBE Participation Rate in Awarded Contracts by TBU FY2017



TANGIBLE RESULT DRIVER:

Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Angela Martin
*Maryland Aviation Administration
(MAA)*

PURPOSE OF MEASURE:

To track MBE prime contractor participation achieved on contracts within MDOT to ensure MDOT provides opportunities to all of business partners.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data will be collected from MDOT and TBUs.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 7.2

Number and Percent of Contracts Awarded to MBE Firms as the Prime Contractor

Participation of MBE firms as a prime contractor is important to facilitate their growth and enable them to compete in the general marketplace after graduation. MBE firms “graduate” from the program when reaching designated thresholds (i.e. company gross receipts and personal net worth of owners).

The information reported in this measure is the number of MBE prime contractors awarded contracts at/above \$500,000. It does not include small purchases. The number of contracts awarded remains low for most TBUs (0 – 2 awards for most MDOT TBUs for the third quarter of FY 2017), however, two TBUs did award 5 and 19 MBE prime contract awards during the third quarter.

The contracts cover a variety of areas including construction, architectural, engineering, maintenance and services.

The overall percentage of MBE prime awards at the designated threshold of \$500,000 and above within MDOT has been around 10 percent, but it reflected a slight decrease in the third quarter and is at 8.25 percent.

Per the strategic plan, input from the Procurement and Fair Practices staff is being obtained regarding approaches to increase the number of MBE primes. Unbundling of contracts, increasing the number of smaller contracts in areas with high levels of MBE firms and enhanced outreach and technical assistance to these firms should have some impact.

PERFORMANCE MEASURE 7.2

Number and Percent of Contracts Awarded to MBE Firms as the Prime Contractor

Chart 7.2.1: Percent of MBE Prime Contracts (at least \$500,000) Awarded by TBU FY2017

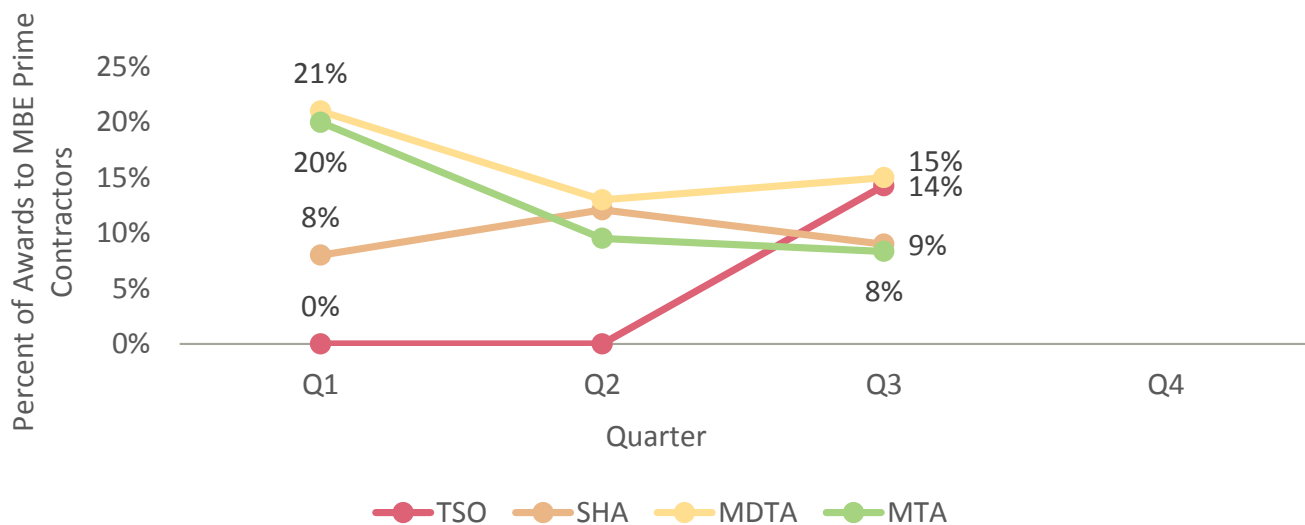
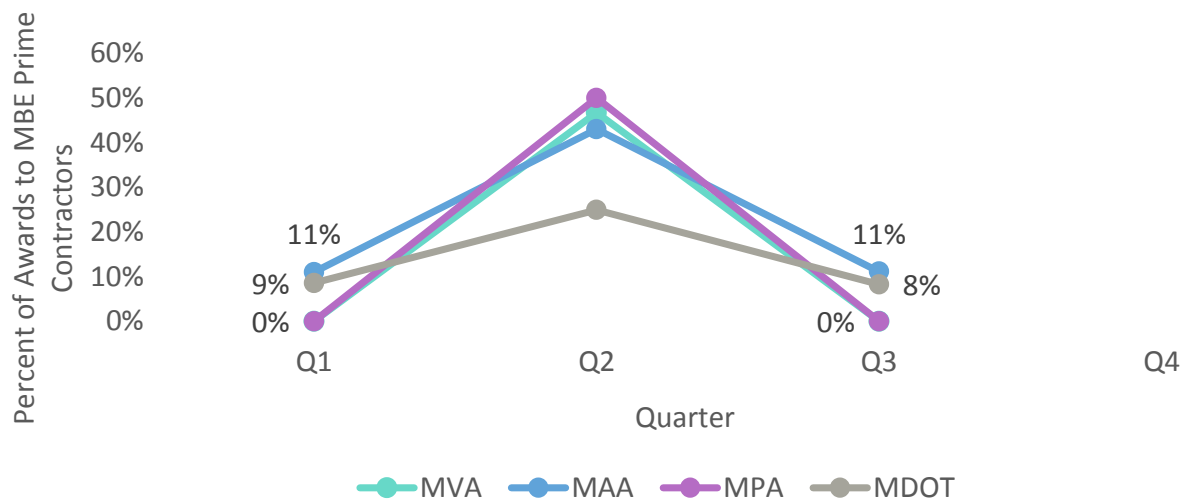


Chart 7.2.2: Percent of MBE Prime Contracts (at least \$500,000) Awarded by TBU FY2017



TANGIBLE RESULT DRIVER:

Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Wonza Spann-Nicholas
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

Track compliance with State mandate for awarding 10% of MDOT's total eligible procurement expenditures to certified Small Business Reserve contracts.

FREQUENCY:

Quarterly, compiled annually

DATA COLLECTION METHODOLOGY:

SBR goal is calculated quarterly from eligible contracts and expenditure data exported from FMIS, iFMIS and US Bank for Corporate Credit Card data.

NATIONAL BENCHMARK:

GOMA maintains the State's official record of SBR designation and spending across 23 participating agencies, including MDOT's TBUs. The State's mandate is 10% or better.

PERFORMANCE MEASURE 7.3

Percent of Payments Awarded to Small Business Reserve (SBR) Contracts

Maryland's economy is powered by the jobs and innovative resources generated by small businesses. The SBR Program is a race-and gender-neutral program that provides small businesses with the opportunity to participate as prime contractors on State contracts and procurements by competing with other small businesses instead of larger, more established firms.

To ensure compliance with State regulations, each TBU is required to participate in the SBR Program by spending at least 10 percent of their annual fiscal year eligible procurement expenditures with qualified small businesses.

For the first time since the SBR Program was established in 2004, MDOT achieved an 11.2 percent participation rate in FY2015. However, GOMA has not yet released the FY2016 Annual Achievement rates.

To increase the SBR Program participation rates, MDOT provided documented policy guidelines to all TBUs. These guidelines focus on increasing the SBR participation rate by requiring an Annual Strategic Plan from each TBU.

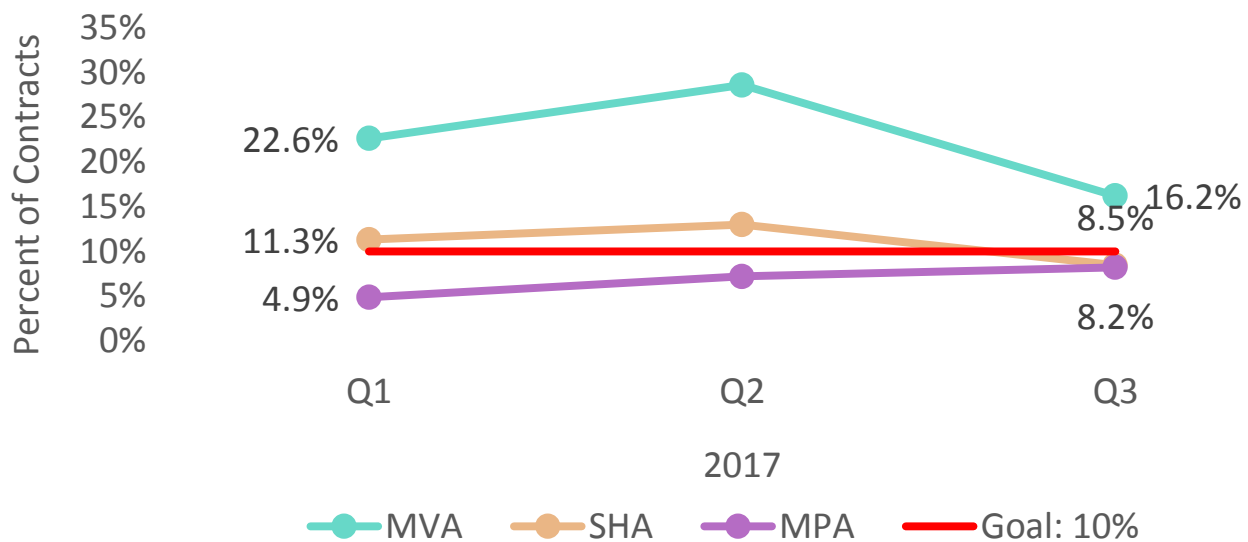
Some strategies include:

- Require Procurement Review Group's approval of SBR goals.
- Create a SBR Liaison and Reporting Expert
- Train/work closely Purchasing Card holders to emphasize SBR firms
- Increase small business outreach and vendor education

PERFORMANCE MEASURE 7.3

Percent of Payments Awarded to Small Business Reserve (SBR) Contracts

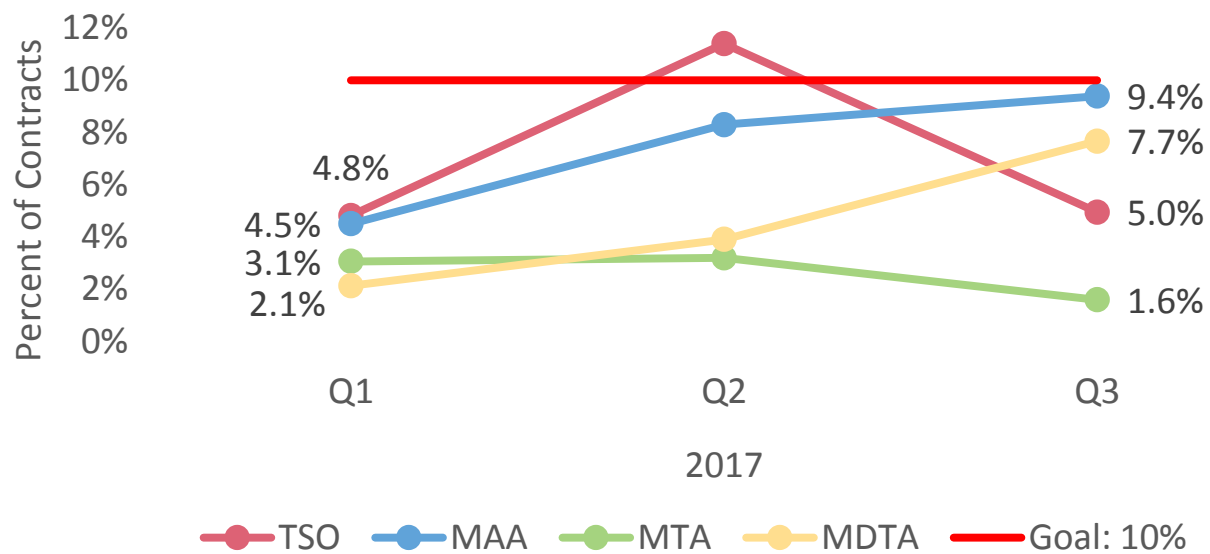
Chart 7.3.1: Small Business Reserve Participation Rate For MVA, SHA, MPA FY2017



PERFORMANCE MEASURE 7.3

Percent of Payments Awarded to Small Business Reserve (SBR) Contracts

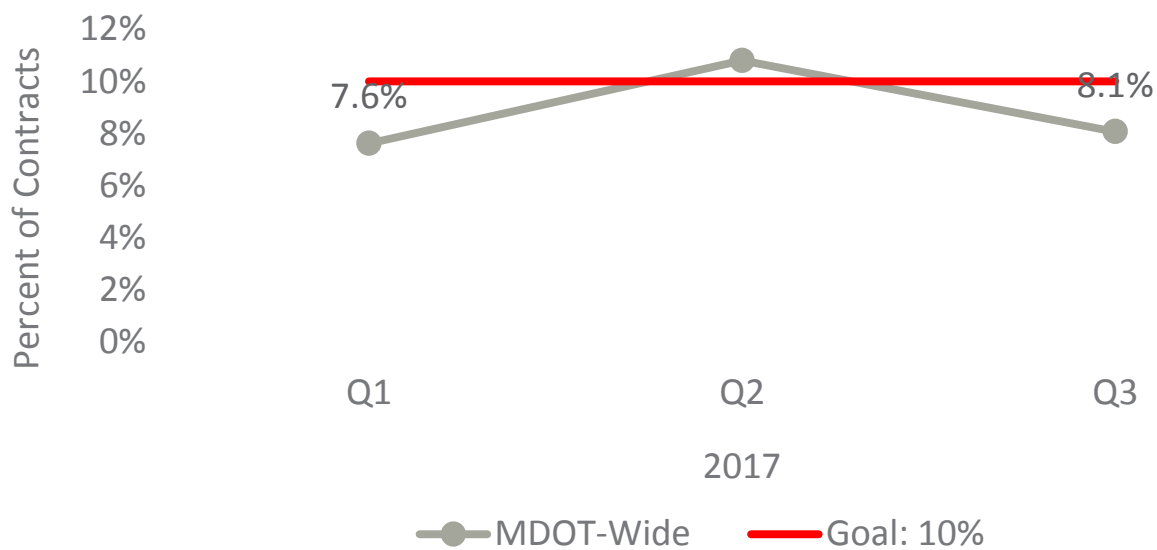
Chart 7.3.2: Small Business Reserve Participation Rate For TSO, MAA, MTA, MDTA FY2017



PERFORMANCE MEASURE 7.3

Percent of Payments Awarded to Small Business Reserve (SBR) Contracts

Chart 7.3.3: Small Business Reserve Participation Rate, MDOT-Wide FY2017



TANGIBLE RESULT DRIVER:

Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Natalie Grasso
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track the percent of VSBE contract values to ensure that MDOT continues a contractual relationship with VSBEs in Maryland.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Using the Financial Management system at MDOT.

NATIONAL BENCHMARK:

N/A

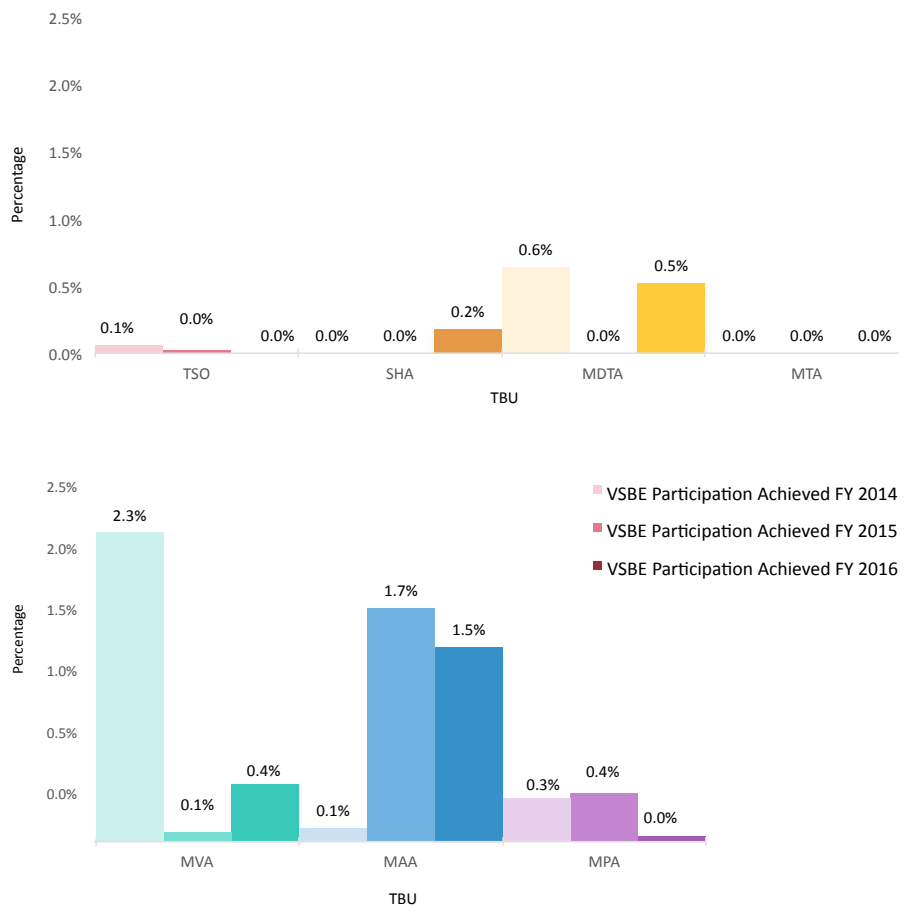
The State's mandate is 1 percent or better of its total dollar value of procurement contracts.

PERFORMANCE MEASURE 7.4

Percent of Veteran Owned Small Business Enterprise (VSBE) Participation

MDOT considers small business, especially veteran owned small businesses, to be an important sector of the business community. Procurement opportunities for this business segment are directly linked to the socioeconomic well-being of the State of Maryland. MDOT is committed to attaining or exceeding the State mandated goal for veteran businesses.

Chart 7.4.1: VSBE Percentage Across MDOT FY 2014-FY2016



TANGIBLE RESULT DRIVER:

Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Luther Dolcar
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To determine the level of satisfaction of our business partners with processes MDOT-wide.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

The Performance Measure Driver administers a Level of Satisfaction survey to MDOT's partners. After the survey cutoff date, the data is then compiled and analyzed. An Outlook email address has been established for easier quarterly reporting.

NATIONAL BENCHMARK:

TBD

PERFORMANCE MEASURE 7.5**Level of Satisfaction of Business Partners**

Tracking business partner satisfaction will allow MDOT to determine how satisfied partners are with current business processes. This performance measure is crucial to gauging MDOT's effectiveness in being fair and reasonable to its business partners. Partners include contractors, consultants, vendors, other state agencies, Federal, State, and local governments, trade associations, commissions, etc. This data can be used to improve those processes that may be ambiguous or cumbersome, and make them more user-friendly. It is important that people who avail themselves of this opportunity know that their comments are taken seriously, and that MDOT is committed to meeting or exceeding business partner expectations.

This performance measure captures MDOT's business partner satisfaction through quarterly surveys. Each quarter, a certain business segment (i.e. Construction, IT, A&E, etc.) is selected to be surveyed and the results are then reported. Each business segment will be surveyed one time per year. This quarter we surveyed MDOT's A&E partners. Surveys are distributed via Survey Monkey.

Because this is an internet-based, voluntary participation survey, the results are not statistically significant. They do, however, offer insights into how business partners view working with MDOT.

PERFORMANCE MEASURE 7.5

Level of Satisfaction of Business Partners

Chart 7.5.1: MDOT Architectural and Engineering (A&E) Partner Satisfaction with Timeliness of Payments CY2017

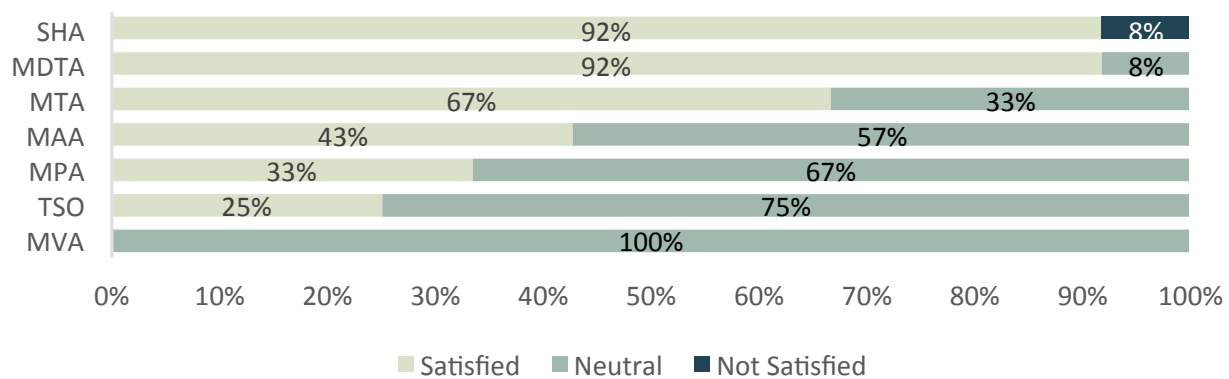
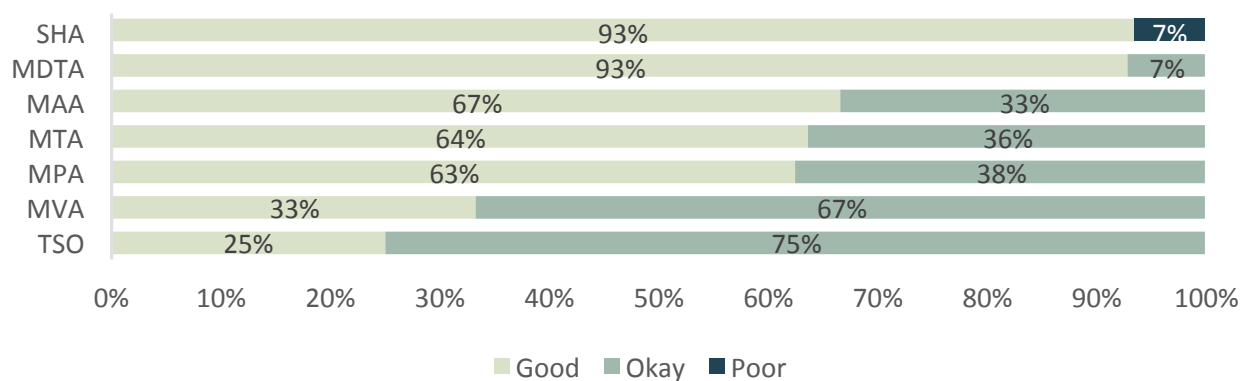


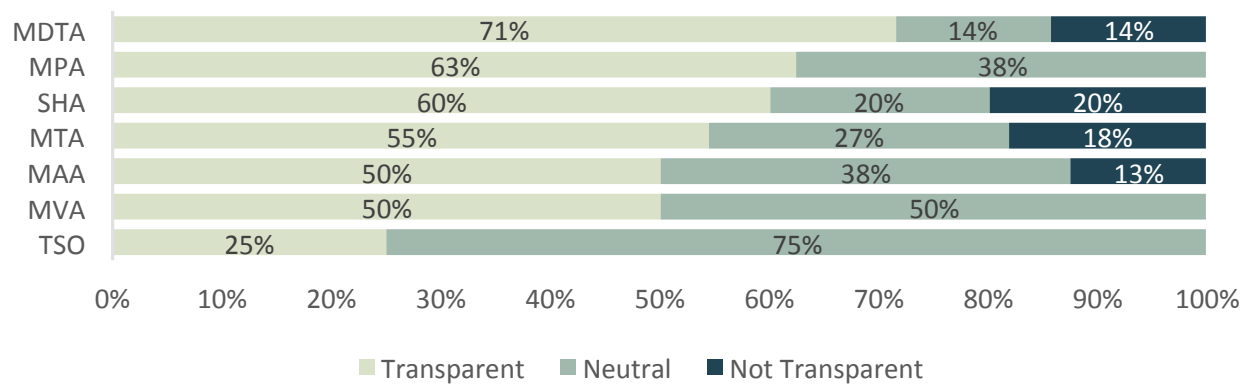
Chart 7.5.2: Architectural and Engineering (A&E) Partner Satisfaction with MDOT Contract Management, by TBU CY2017



PERFORMANCE MEASURE 7.5

Level of Satisfaction of Business Partners

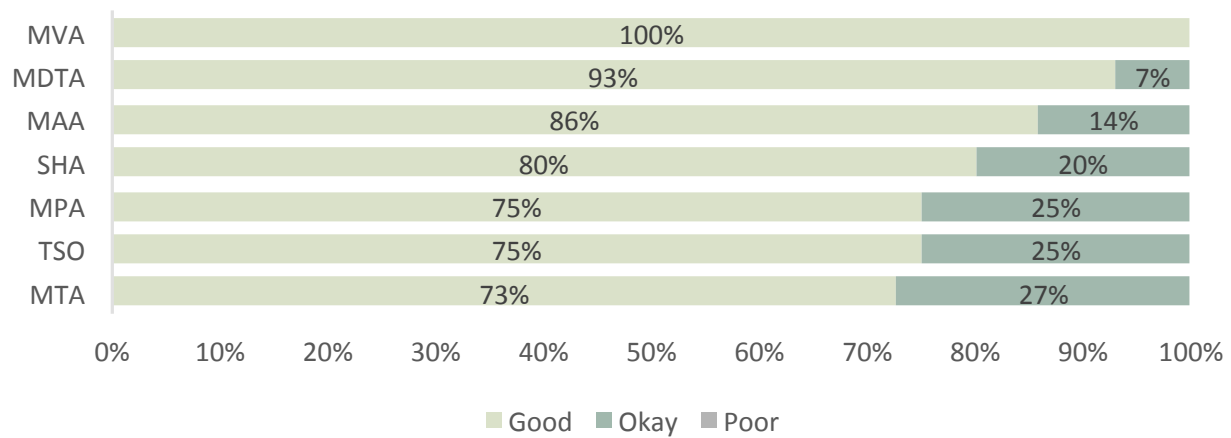
**Chart 7.5.3: Architectural and Engineering (A&E) Partner Assessment of Transparency in the MDOT Procurement Process
CY2017**



PERFORMANCE MEASURE 7.5

Level of Satisfaction of Business Partners

Chart 7.5.4: MDOT TBUs Rated as Business Partners to Architectural and Engineering (A&E) Partner CY2017



Be Fair and Reasonable to Our Partners

TANGIBLE RESULT DRIVER:

Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

David Lynch
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To assess the number and percent of invoices properly paid to MDOT's partners in compliance with State requirements so MDOT can be responsive to business partners needs.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

MDOT Finance reports data monthly by TBUs.

NATIONAL BENCHMARK:

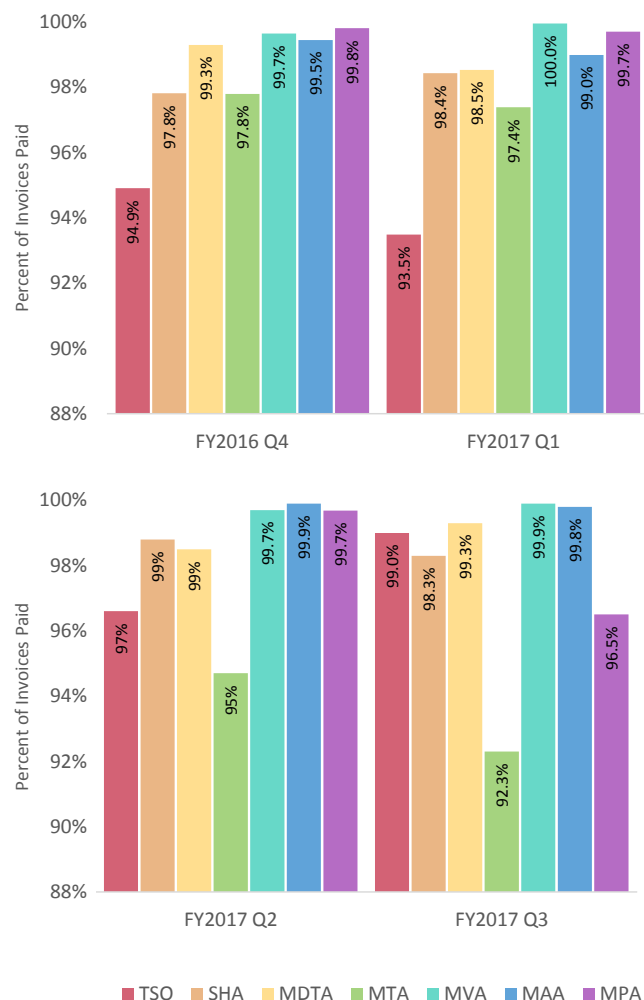
N/A

PERFORMANCE MEASURE 7.6

Number and Percent of Invoices Properly Paid to Partners in Compliance with State Requirements

MDOT will treat contractors fairly by promptly paying invoices. Contractors should be able to trust MDOT TBUs consistency of payment with a goal of paying invoices within 30 calendar days 99 percent of the time. For FY2016 MDOT achieved an on time payment rate of 98.62 percent. As of 4th quarter FY2016 data from MVA now only consists of vendor invoices.

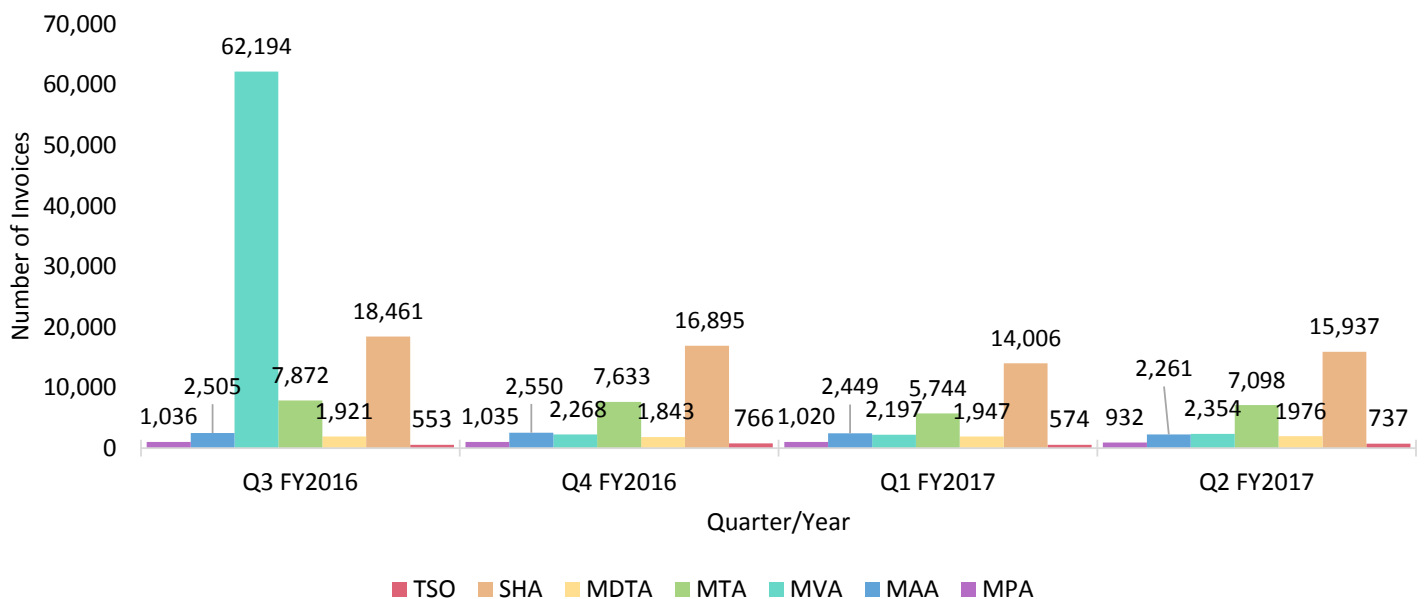
Chart 7.6.1: Percent of Invoices Properly Paid Within 30 Days of Invoices First Quarters of Fiscal Year 2017



PERFORMANCE MEASURE 7.6

Number and Percent of Invoices Properly Paid to Partners in Compliance with State Requirements

Chart 7.6.2: Percent of Invoices Properly Paid - Total Number of Invoices Q3 and Q4 FY2016 and Q1 and Q2 FY2017



PERFORMANCE MEASURE 7.6

Number and Percent of Invoices Properly Paid to Partners in Compliance with State Requirements

Chart 7.6.3: Total Number of Invoices by TBU FY2014 - FY2016

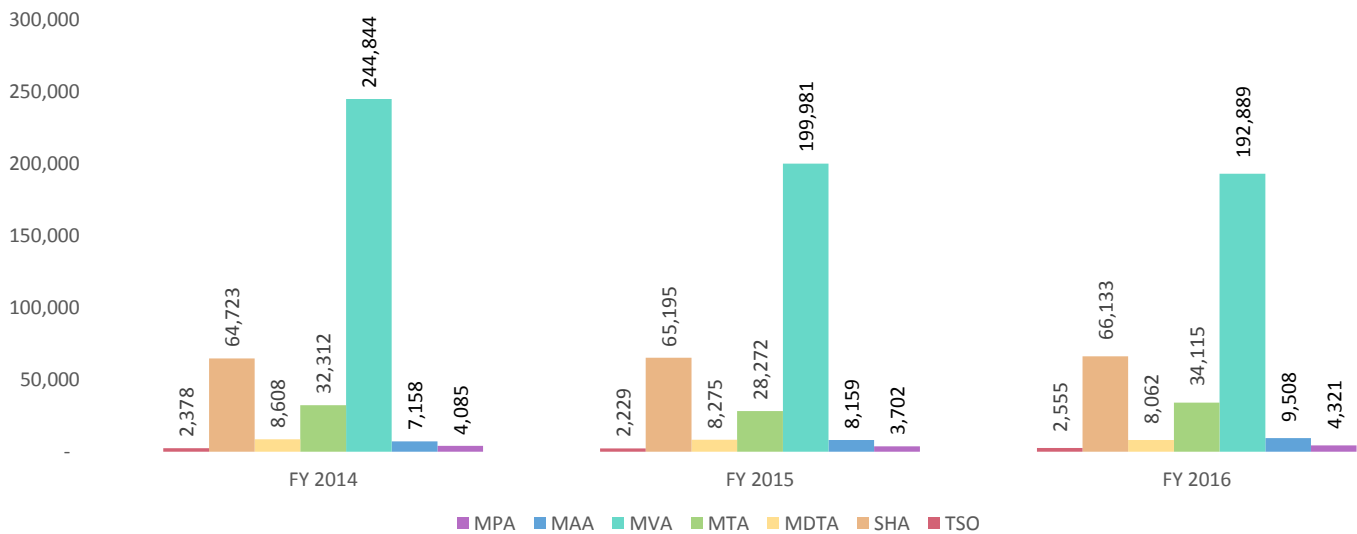
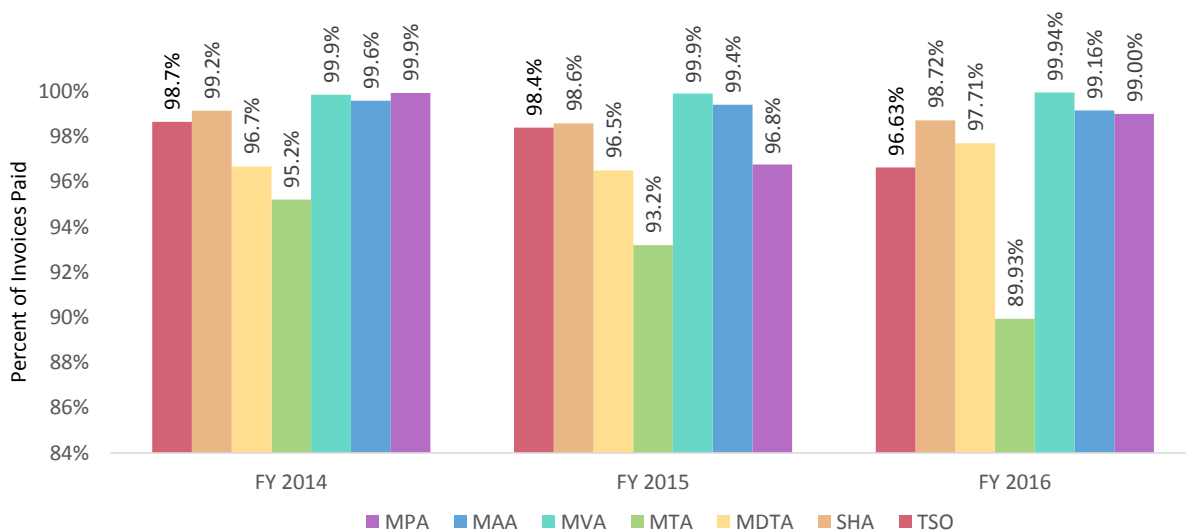


Chart 7.6.4: Percentage of Invoices Paid within Thirty Days' Time FY2014 - FY2016



TANGIBLE RESULT DRIVER:

Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Mike Zimmerman
The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To determine what percentage of protests are legitimate and how MDOT can reduce the number of non-legitimate protests to create better solicitations for business partners.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

MDOT TBU procurement departments report protest data to TSO Procurement on a monthly basis. Data is aggregated for reporting purposes.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 7.7

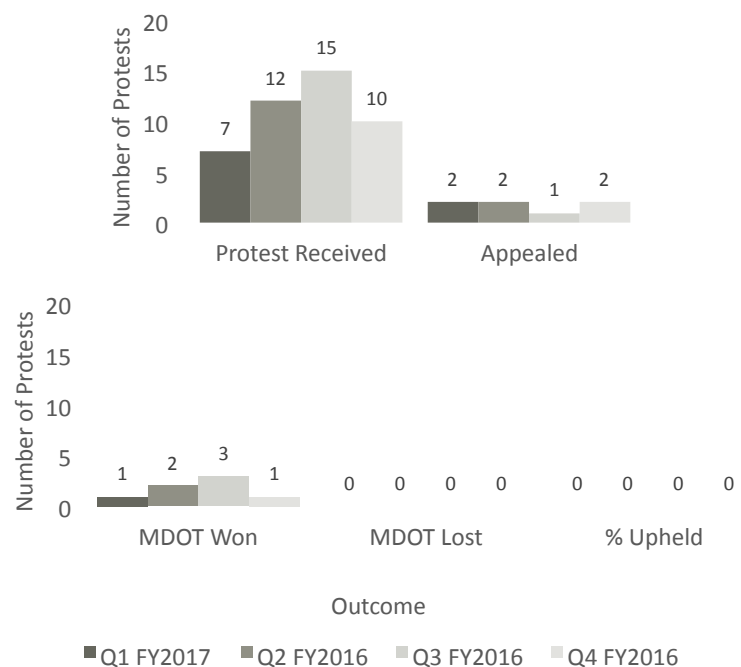
Number of MDOT Procurement Protests Filed and Percent of Protests Upheld by the Board of Contract Appeals

Minimizing protests and understanding how to avoid non-legitimate protests will enable MDOT to develop better solicitations and foster better relationships with business partners. Tracking contract protests will allow MDOT to determine how many protests are being filed without warrant, how many are legitimate, and how MDOT can create more concise solicitations for partners. The protest process is important because it allows a company doing business with the State to have confidence in the State's solicitation process by understanding that an aggrieved entity has the ability to be heard.

The TSO Office of Procurement (OOP) is collecting data from all the TBUs. TSO's OOP is documenting the number of protests as well as the reason for the protest.

The TSO OOP will collect data regarding protests so that root cause and corrective/preventive action can be implemented. Currently there is not enough detail to determine the root cause.

Chart 7.7.1: Running Twelve Month Procurement Protests by Quarter



TANGIBLE RESULT #8

Be a Good Neighbor



As the owner of statewide transportation facilities, MDOT must work to find solutions that work for customers and are sensitive to our neighbors.

RESULT DRIVER:

Simon Taylor

Maryland Aviation Administration (MAA)

TANGIBLE RESULT DRIVER:

Simon Taylor
Maryland Aviation Administration

PERFORMANCE MEASURE DRIVER:

Anthony Crawford
State Highway Administration (SHA)

Timothy Cooke
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To ensure that MDOT maintains attractive and clean facilities with amenities that benefit neighbors.

FREQUENCY:

Annually (April)

DATA COLLECTION METHODOLOGY:

This will be assessed through an internal assessment and satisfaction survey developed by staff with neighbor input including cleanliness, appearance, operations, access, and safety at MDOT facilities.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 8.1

Percent of MDOT Facilities that Meet or Exceed Our Neighbor's Expectations

Attractive, efficient, and safe operations of MDOT facilities directly affect the surrounding neighbors and communities. MDOT values the relationships with neighbors and is committed to ensure the Department meets or exceeds their expectations. MDOT will engage neighbors through a survey and outreach to better understand the impact that its facilities have on communities and how the Department can be a better neighbor.

The Neighbor Satisfaction Surveys of 40 primary MDOT operating facilities were completed in the Spring of 2017. The surveys were conducted statewide using mailings, social media, and in-person visits focusing on the overall appearance and operations through the eyes of neighbors. The results reveal that 77 percent of survey respondents believe the facility appearance meets or exceeds their expectations, while 82 percent believe the operations at the facility meets or exceeds their expectations. Areas in need of improvement include grounds maintenance, noise, and traffic operations.

The facility assessments and survey results are used to develop improvement plans for each facility and ensure MDOT is committed to address our neighbors' concerns and continue to be good neighbors.

In addition to the improvement plans, the TBUs are implementing strategies to establish relationships and engage surrounding communities. Examples include:

- Facility Improvement Plans
- Increase Community Outreach and Engagement by:
 - Hosting Open House Events
 - Attending Community Association Meetings
- Program to Track and Address Neighbor Concerns

PERFORMANCE MEASURE 8.1

Percent of MDOT Facilities that Meet or Exceed Our Neighbor's Expectations

Chart 8.1.1: Percent of Surveyed Neighbors Who Say MDOT Facilities Meet or Exceed Expectations CY2017

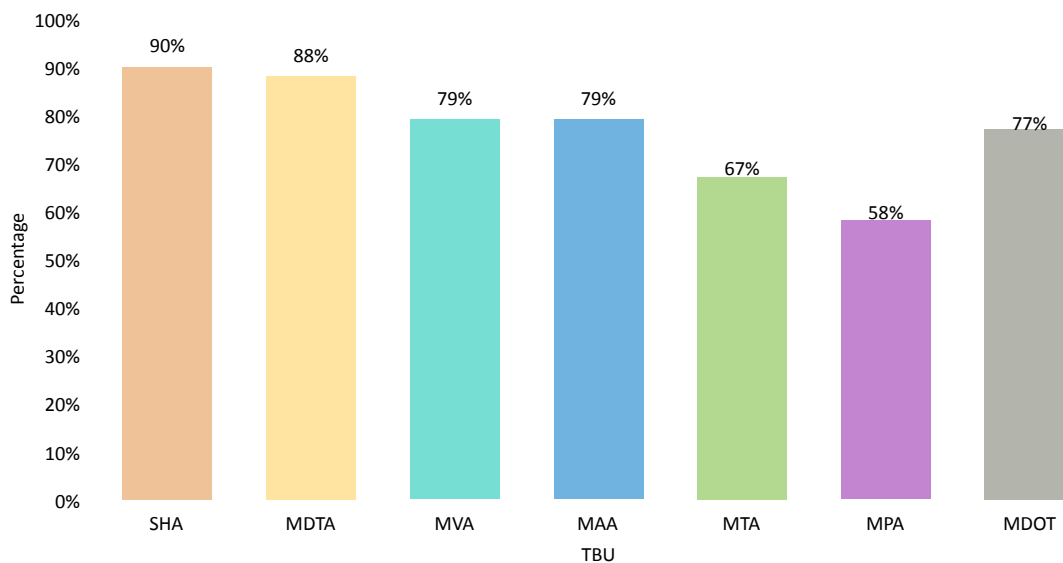
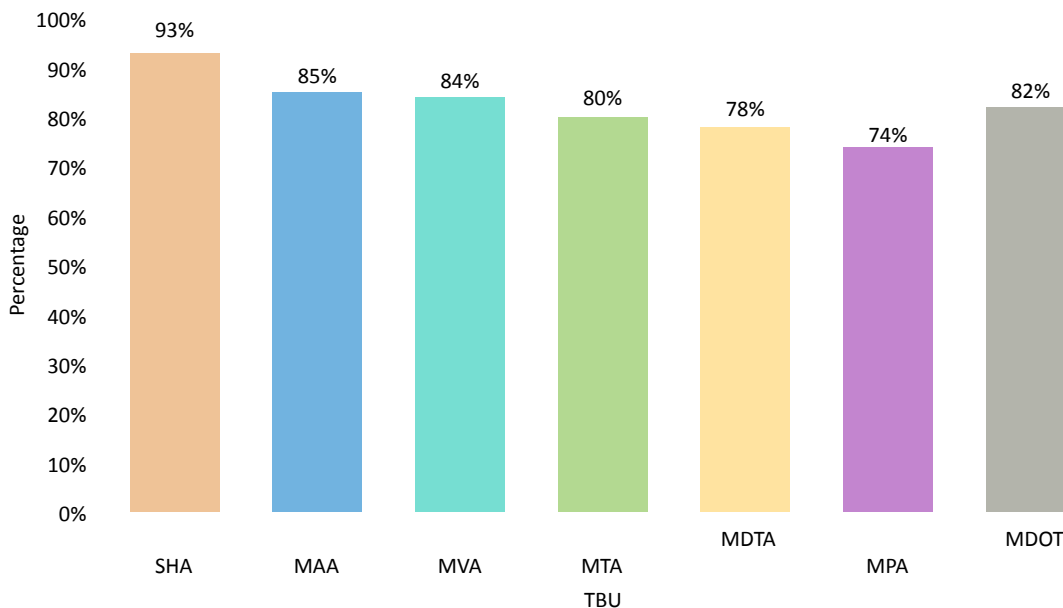


Chart 8.1.2: Percent of Surveyed Neighbors Who Say MDOT Operations Meet or Exceed Expectations CY2017



TANGIBLE RESULT DRIVER:

Simon Taylor
Maryland Aviation Administration (MAA)

PERFORMANCE MEASURE DRIVER:

Michael Phennicie
Maryland Aviation Administration (MAA)

Jill Lemke
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To expand and strengthen community outreach programs to continuously improve relationships with neighbors.

FREQUENCY:

Quarterly & Annually

DATA COLLECTION METHODOLOGY:

Data on the number of outreach activities is tallied and reported by each business unit on a quarterly basis. A team of data drivers from each unit meets with the PM Driver to review the submitted data and discuss types of activities and lessons learned.

Satisfaction surveys are tallied and overall results reported annually.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 8.2A AND B

Educational/ Civic Outreach Efforts with Neighbors: Number of activities and Satisfaction with Educational/Civic Outreach Efforts

Being a good neighbor requires opportunities for shared experiences and face-to-face interactions. Community outreach programs can vary greatly in topic, size, and scope, particularly across the various MDOT business units. These diverse activities establish good relationships, the sharing of information, and ultimately spread good will throughout the community.

By documenting the number, scope, and level of satisfaction with these activities, and sharing experiences with one another, each TBU can expand and enhance its community outreach efforts while maintaining and strengthening relationships with those Marylanders who live adjacent to MDOT's various transportation facilities.

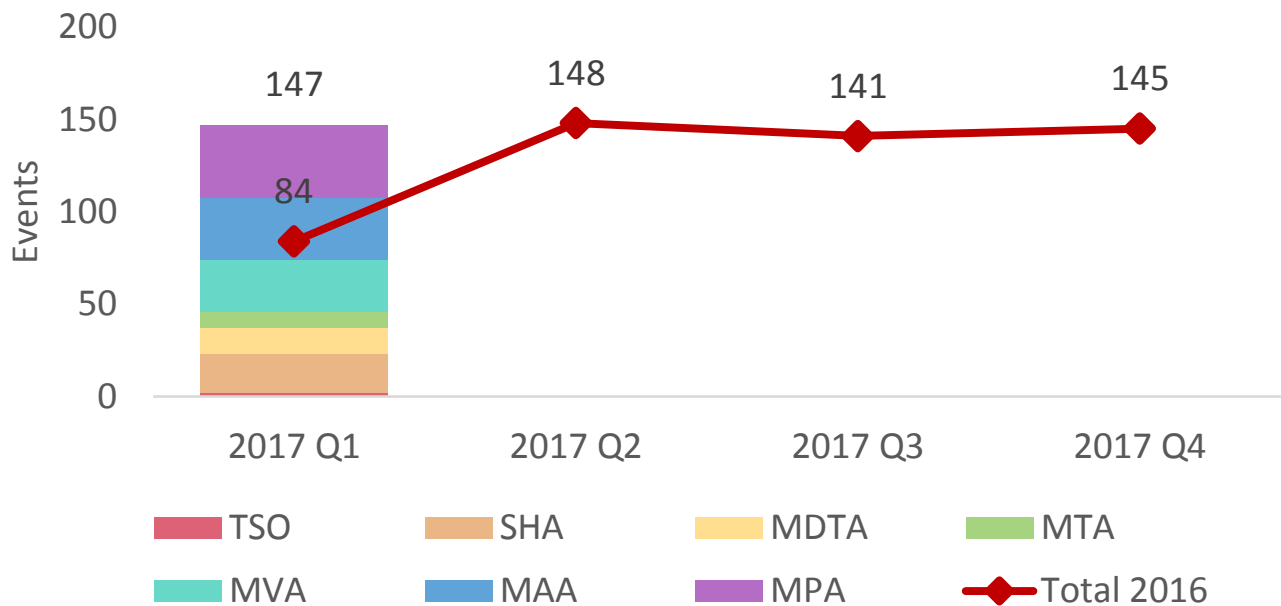
When the measure was introduced, no data existed. After a year, MDOT reached an important milestone for this performance measure, and now have a years' worth of data to establish a baseline. Through the implementation of a satisfaction survey MDOT can determine which outreach efforts are best received by neighbors.

MDOT is identifying areas for improvement, and working with each business unit to encourage more effective outreach program development. Outreach information is being shared between business units, including examples of successful outreach opportunities that can be replicated.

PERFORMANCE MEASURE 8.2A AND B

Educational/ Civic Outreach Efforts with Neighbors: Number of activities and Satisfaction with Educational/Civic Outreach Efforts

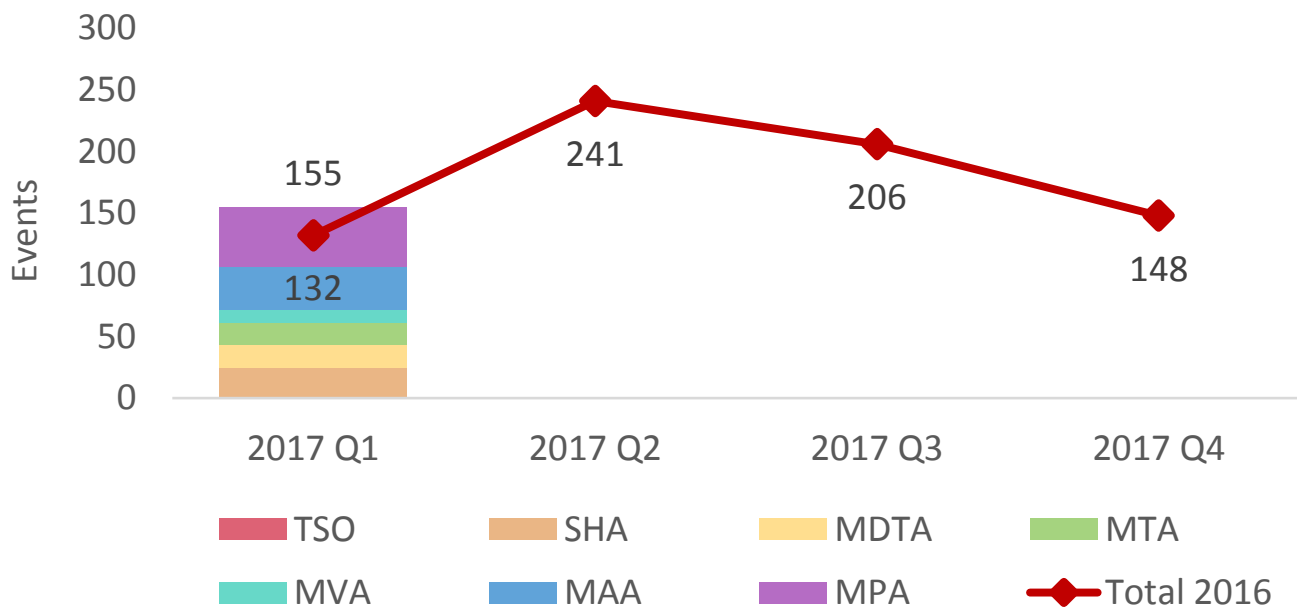
Chart 8.2A.1: Educational Events by TBU CY2017



PERFORMANCE MEASURE 8.2A AND B

Educational/ Civic Outreach Efforts with Neighbors: Number of activities and Satisfaction with Educational/Civic Outreach Efforts

Chart 8.2A.2: Educational Outreach Events by TBU CY2017



PERFORMANCE MEASURE 8.2A AND B

Educational/ Civic Outreach Efforts with Neighbors: Number of activities and Satisfaction with Educational/Civic Outreach Efforts

Chart 8.2B.1: How useful was the information presented in CY2016?

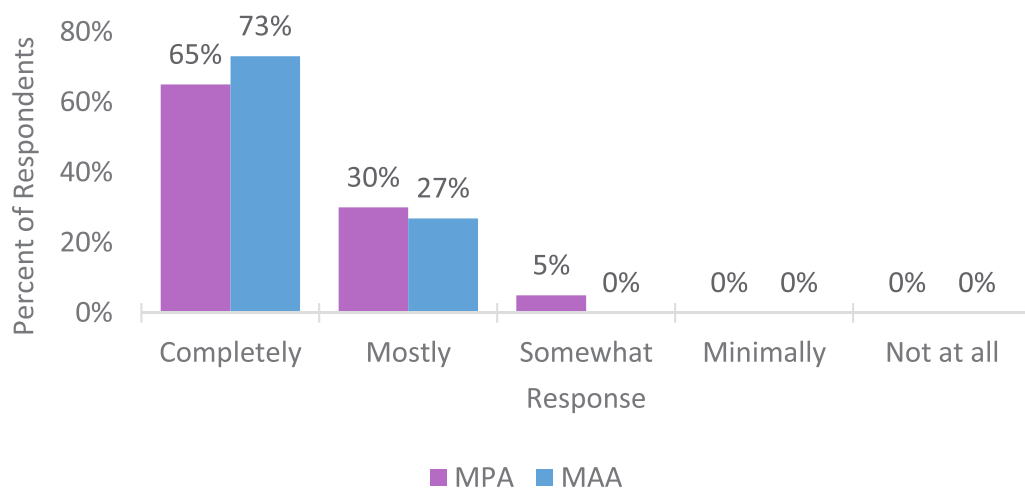
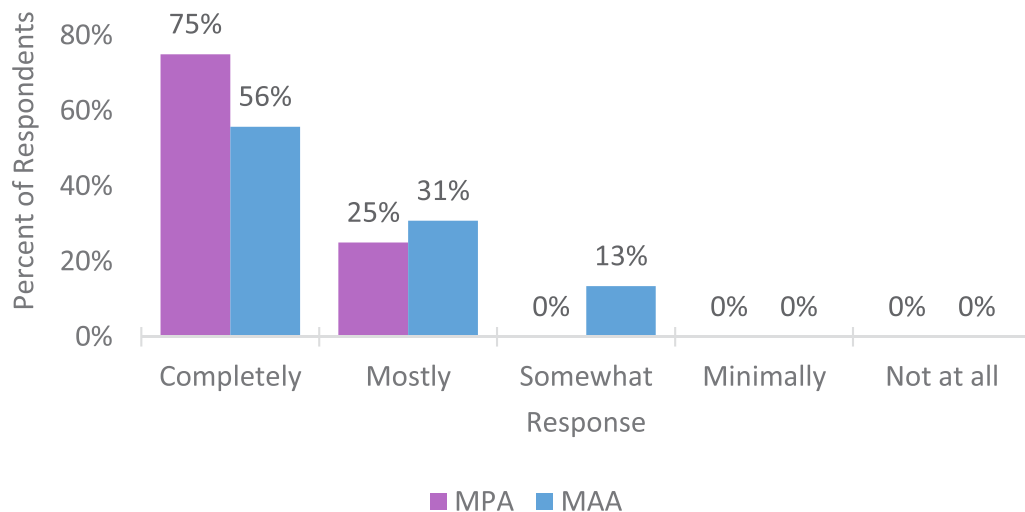


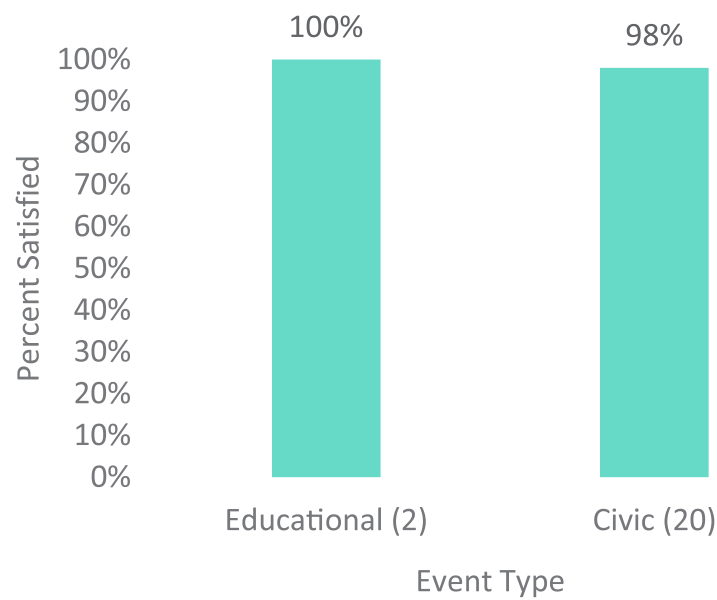
Chart 8.2B.2: How satisfied were you with the event or presentation in CY2016?



PERFORMANCE MEASURE 8.2A AND B

Educational/ Civic Outreach Efforts with Neighbors: Number of activities and Satisfaction with Educational/Civic Outreach Efforts

Chart 8.2B.3: MVA Overall Satisfaction (by Event Type) in CY2016



TANGIBLE RESULT DRIVER:

Simon Taylor
Maryland Aviation Administration
(MAA)

PERFORMANCE MEASURE DRIVER:

Jim Hoover
Maryland Transit Administration (MTA)

Terri Whitehead
Maryland Vehicle Administration
(MVA)

PURPOSE OF MEASURE:

To assess the percent of facilities that meet or exceed ADA accessibility mandates and to ensure everyone access to facilities.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

Data on the number of owned and occupied facilities along with the number of facilities that are Americans with Disabilities Act (ADA) compliant are tallied and reported by each business unit on an annual basis.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 8.3

Percent of MDOT Facilities that are ADA Compliant

Compiling and charting data for seven TBUs on the percent of their administrative buildings that are owned and occupied daily that meet or exceed ADA mandates is essential to MDOT's customers and more importantly to MDOT's neighbors to ensure everyone can visit MDOT facilities. Data collected will help to inform each TBU across MDOT on how and where to focus their resources to meet ADA compliance and make administrative buildings more accommodating to all customers and neighbors who visit our Buildings.

Percent of owned and occupied TBU administrative buildings that are ADA Compliant:

1. TSO - 01 owned and occupied; 01 compliant = (100%)
2. SHA - 33 owned and occupied; 33 compliant = (100%)
3. MDTA - 12 owned and occupied; 12 compliant = (100%)
4. MTA - 16 owned and occupied; 16 compliant = (100%)
5. MVA - 33 owned and occupied; 33 compliant = (100%)
6. MAA - 61 owned and occupied; 61 compliant = (100%)
7. MPA - 05 owned and occupied; 03 compliant = (60%)
8. MDOT WIDE – 161 owned and occupied; 159 compliant = (99%)

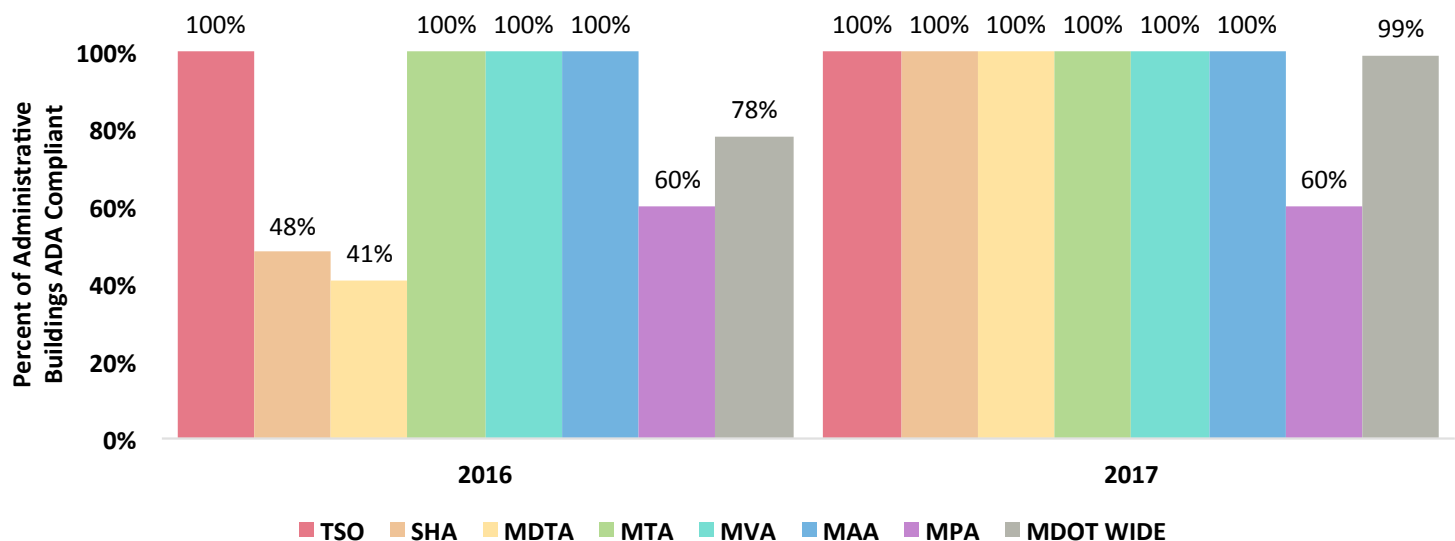
MDOT owned properties include several different elements that meet or exceed the ADA requirements. The report is related to administrative buildings only that are owned and occupied daily.

PERFORMANCE MEASURE 8.3

Percent of MDOT Facilities that are ADA Compliant

- MDOT owned properties include several different elements that meet or exceed ADA requirements.
- Second annual report is related to administrative buildings that are owned and occupied daily. Rental properties, warehouses, mechanical shops, park and rides, and salt structures are not reported on in this report.
- SHA, MVA, and MDTA reported progress and changes for 2017. Data collected from July 2016 to present indicates improvement. Several meetings with individual TBU's were conducted throughout the year with Data Drivers to get a better understanding of the performance measure. Increases in percentages from individual TBU's is a direct result of a better understanding of ADA compliance and how it relates to performance measure.
- For the remaining one percent non-complaint, a team of key subject matter experts and a leader will develop a strategic action; data on results, trends, and challenges are being collected now.

Chart 8.3.1: Percent of Administrative Buildings that are ADA Compliant by TBU CY2016-CY2017



TANGIBLE RESULT DRIVER:

Simon Taylor
Maryland Aviation Administration

PERFORMANCE MEASURE DRIVER:

Timothy Cooke
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

Understand how many property damage claims are being made by neighbors against MDOT TBU's and customer satisfaction with the claim process.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Maryland Treasurer's Office records on state department property damage claims.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 8.4A AND B

Number of Property Damage Claims and Percent of Customers Satisfied with How Their Property Claim was Handled

Measuring the number of property damage claims by neighbors adjacent to MDOT facilities informs each TBU where extra awareness can keep claims from occurring.

In March 2017, this measure was added to TR 8. After requesting information on claims submitted by neighbors from the Treasurer's office and then each TBU, the data showed there were few instances of property damage being filed by neighbors. The vast majority of claims were "slip and falls" or a special circumstance such as a mailbox being knocked over by a snow plow in western Maryland.

The initial performance measure did not include claims like rocks hitting windshields while a road is being milled prior to paving. In mid-June, a decision was made to expand the measure to all property damage claims, which will include but is not limited to rocks in windshields, side swipes on parked (or moving vehicles) by TBU vehicles, and possible water contamination issues from salting the roads in the winter.

This baseline data will be shared in October along with the strategies on ways to make property claims from neighbors in a more satisfactory way, regardless of the outcome to the neighbor and/or TBU.

TANGIBLE RESULT DRIVER:

Simon Taylor
Maryland Aviation Administration

PERFORMANCE MEASURE DRIVER:

David Seman
The Secretary's Office (TSO)

PURPOSE OF MEASURE:

Tracking instances of traffic violations will enable MDOT to better assess its impact on communities and contribute to improved public safety.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Traffic violation data provided by individual TBU fleet managers.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 8.5

Number of Traffic Violations While Driving a State Vehicle

Tracking vehicle citations by TBU will give MDOT the ability to strengthen driver education training and direction corrective action. This will show that MDOT employees care about public safety by reducing instances of violations. MDOT's mission is to ensure safe and dependable modes of transportation to the community and lead by example.

Although data collection for this measure continues to improve, the initial analysis of available data shows that MTA and SHA, TBUs with the largest vehicle fleets in MDOT, account for the majority of all traffic violations, including speeding, red light running, and parking. Although the total number of MDOT speeding tickets decreased from 2014 to 2016, the number of red light camera tickets increased during the same period: 129 in 2014 to 202 in 2016, a 57 percent increase.

To improve MDOT's understanding of traffic violation patterns and trends, TBUs will work toward a more standardized collection and reporting method. More accurate reporting will help MDOT to limit risk, ensure safe performance of MDOT's fleet vehicles, and keep the public and MDOT employees safe in daily operations.

PERFORMANCE MEASURE 8.5

Number of Traffic Violations While Driving a State Vehicle

Chart 8.5.1: Speeding Violations by TBU CY2014-CY2016

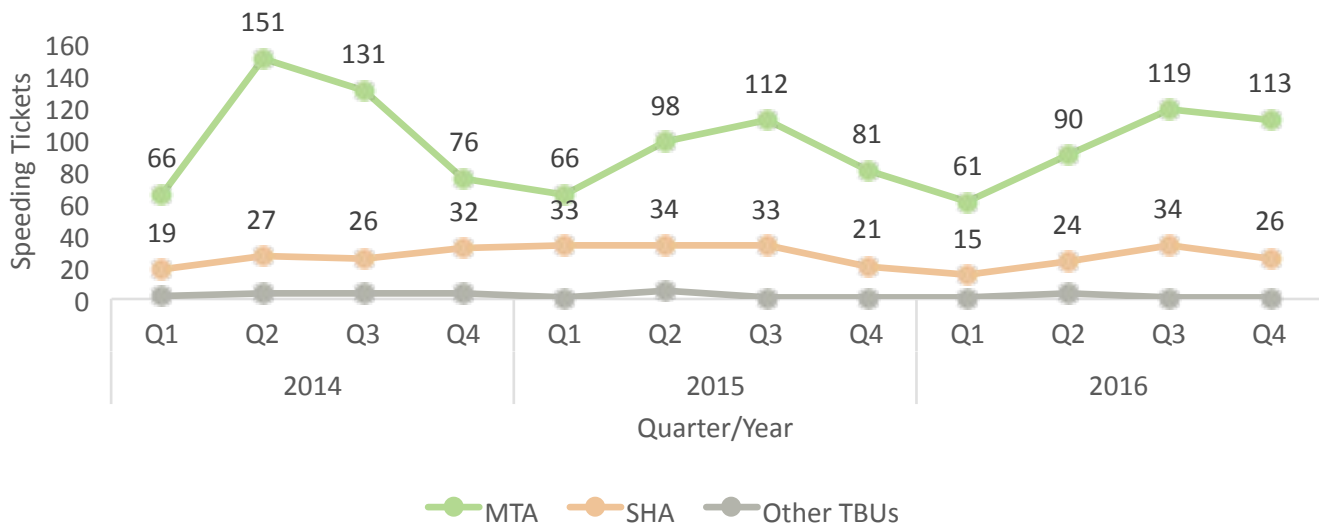
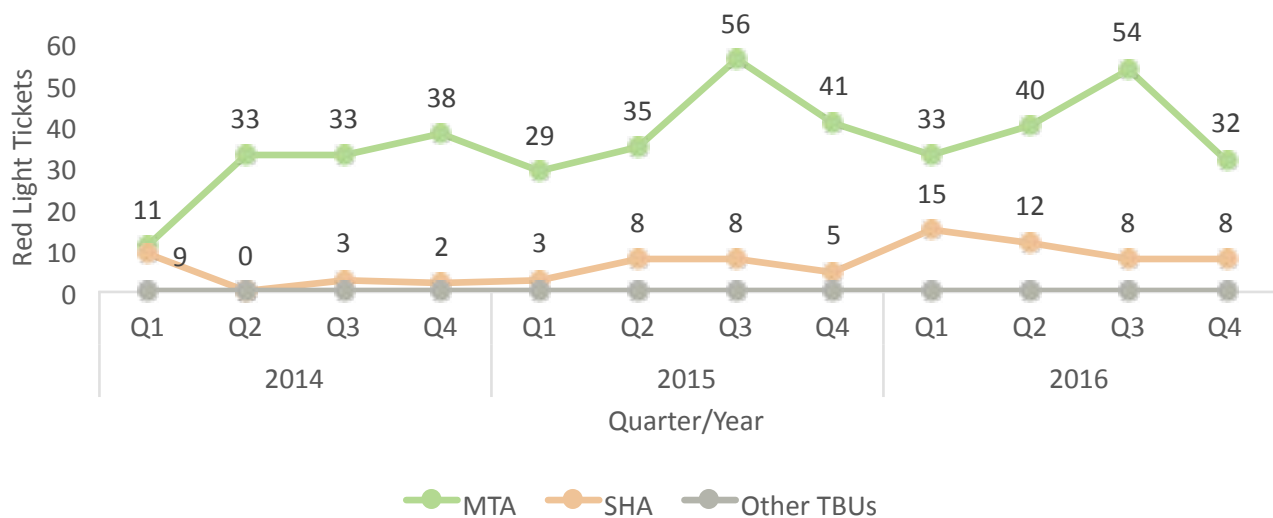


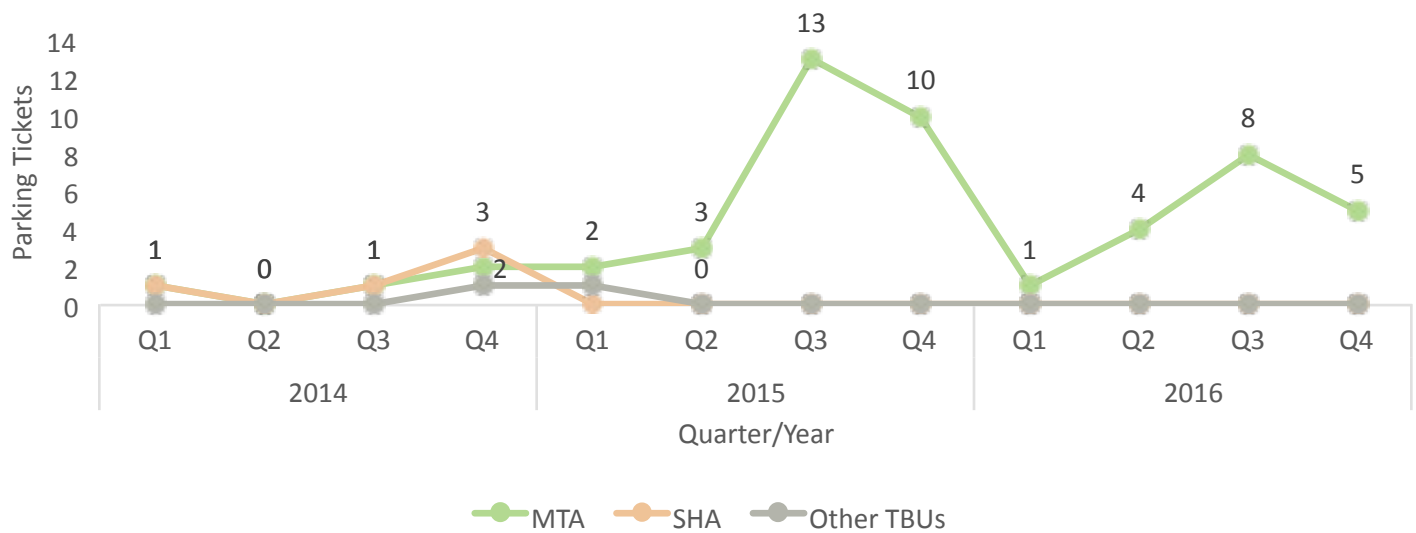
Chart 8.5.2: Red Light Camera Violations by TBU CY2014-CY2016



PERFORMANCE MEASURE 8.5

Number of Traffic Violations While Driving a State Vehicle

Chart 8.5.3: Parking Violations by TBU CY2014-CY2016



TANGIBLE RESULT #9

Be a Good Steward of Our Environment



MDOT will be accountable to customers for the wise use of resources and impacts on the environment when designing, building, operating and maintaining a transportation system.

RESULT DRIVER:

Dorothy Morrison

The Secretary's Office (TSO)

TANGIBLE RESULT DRIVER:

Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Sonal Ram
State Highway Administration (SHA)

PURPOSE OF MEASURE:

To evaluate the health of the Chesapeake Bay by measuring how well MDOT is achieving compliance with impervious surface restoration as required by the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

MDOT is tracking all Bay restoration projects and impervious surface treatment associated with those projects to determine overall progress toward the 20 percent goal during their five-year permit term.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 9.1

Water Quality Treatment to Protect and Restore the Chesapeake Bay

The fastest growing source of pollution in the Chesapeake Bay is stormwater runoff. Urbanization intensifies runoff by increasing paved surfaces and decreasing areas where rainfall can seep into the ground. Stormwater runoff increases delivery of pollutants including trash, organic debris, and sediment from impervious areas to urban streams.

Restoration efforts for 20 percent of MDOT's existing impervious surfaces will increase infiltration and reduce stormwater runoff. MDOT uses restoration practices such as installing new and upgrading existing stormwater management facilities, stream restoration, tree planting, and operations like street sweeping and inlet cleaning. This will improve conditions in urban streams, and reduce pollution in the Chesapeake Bay.

Chart 9.1.1 compares the impervious restoration accomplished by each TBU with the remaining acreage to be treated to meet the 20 percent restoration goal.

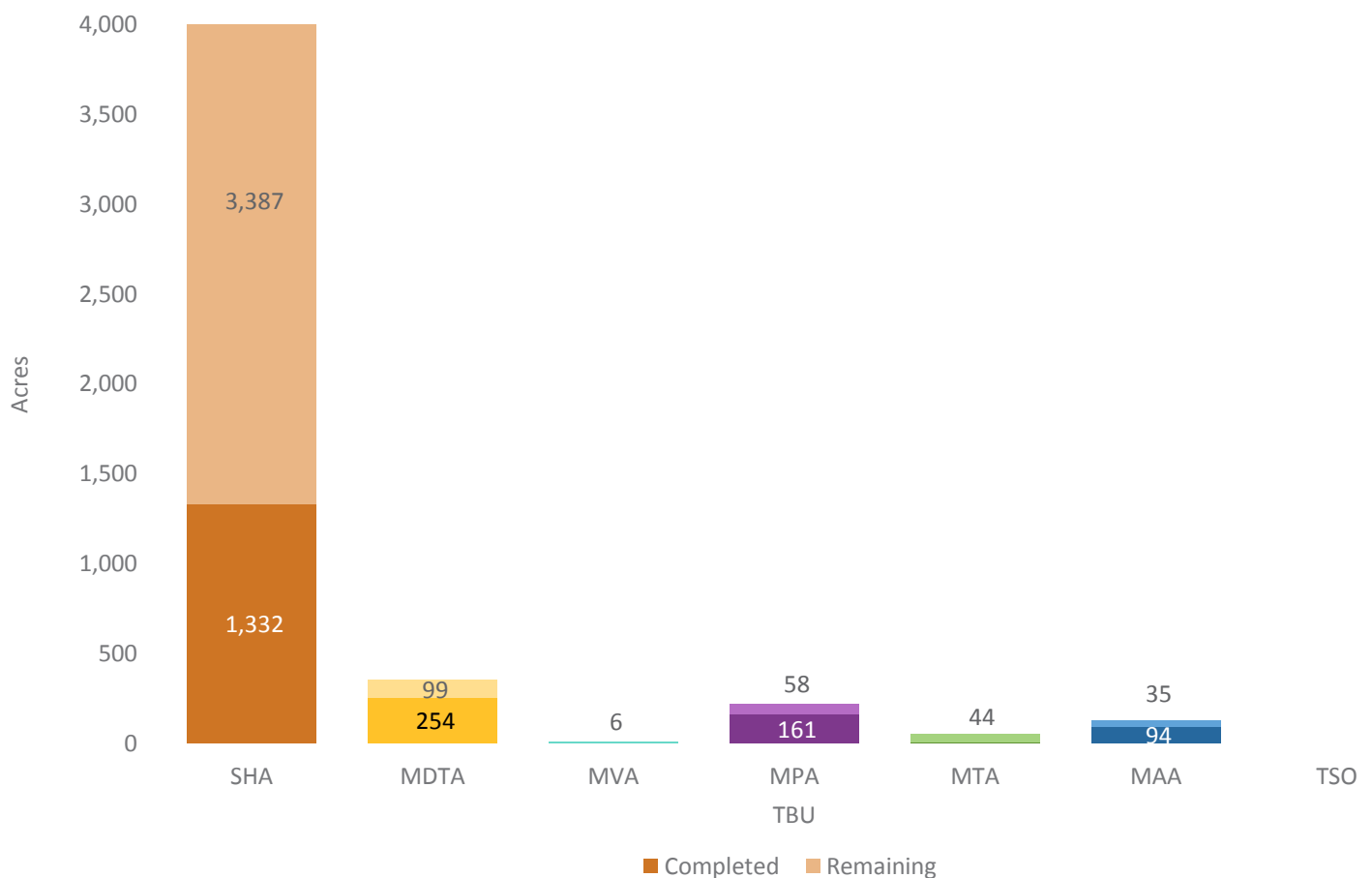
Approaching the 20 percent restoration requirements with a holistic one-MDOT strategy will include:

- Increased collaboration and data sharing between TBUs;
- Intelligent analysis of cost and restoration strategy to determine the most economical opportunities for impervious restoration across all of MDOT; and
- Close coordination and collaboration to ensure all TBUs are adequately tracking and implementing Bay restoration projects and impervious surface treatment.

PERFORMANCE MEASURE 9.1

Water Quality Treatment to Protect and Restore the Chesapeake Bay

Chart 9.1.1: MDOT Impervious Restoration in Acres YTD



Be a Good Steward of Our Environment

TANGIBLE RESULT DRIVER:

Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Paul Truntich Jr.
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To track overall fuel economy of fleet vehicles and ensure better air quality through the use of State vehicles. It is important to track miles per gallon in a meaningful manner to ensure that State vehicles are fuel efficient and not detrimental to air quality. Fuel economy data will be used to evaluate driving patterns as well as when the procurement of new fleet vehicles is considered.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

Fleet MPG data will be obtained from the State of Maryland's fuel service vendor.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 9.2A

Fuel Efficiency: Miles Per Gallon

Reduced fuel costs and conservation of petroleum-based resources are the direct results of a more fuel efficient fleet (as determined through increases in vehicle miles per gallon calculations). Efforts with Mansfield Oil Company (statewide fueling vendor) have resulted in developing a means of tracking miles per gallon (MPG) data for the light-duty fleet throughout all TBUs. MPG data for CY 2015 and CY 2016 has been calculated and presented in Chart 9.2A.1. Although data is only presented for two years, fuel efficiency has increased by 0.5 MPG MDOT-wide from 2015 (16.9 MPG) to 2016 (17.4 MPG).

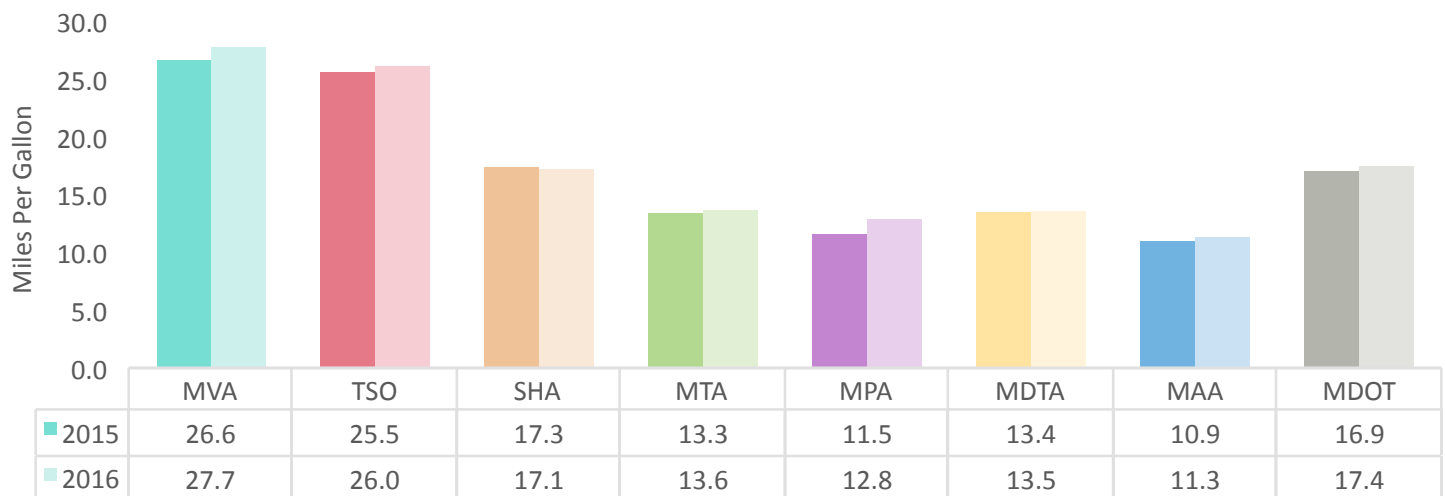
Vehicle replacement practices represent the largest factor affecting change to this measure. At pre-determined age or mileage thresholds, fleet vehicles are replaced. Since the presumption is that newer models are more fuel efficient than their predecessors, MPG calculations for each TBU and the MDOT-wide should increase from year to year through fleet replacement activities. However, in addition to fleet replacement, strategies such as encouraging carpooling to meetings and other functions and modifying state vehicle purchasing contract requirements are being evaluated as additional means of improving fleet MPG.



PERFORMANCE MEASURE 9.2A

Fuel Efficiency: Miles Per Gallon

9.2A.1: MDOT TBU Light-Duty Vehicle Average MPG CY2015-CY2016



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TANGIBLE RESULT DRIVER:

Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Paul Truntich Jr.
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To track overall fuel consumption of fleet vehicles as well as fixed-equipment in an effort to use less resources with State vehicles and equipment. Consumption patterns will be evaluated for improving fuel efficiency and shifting towards use of renewable fuels.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Fleet vehicle data will be obtained from the State of Maryland's fuel service vendor. Fixed-equipment data will be supplied from Fleet and Facility Managers at the TBUs.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 9.2B

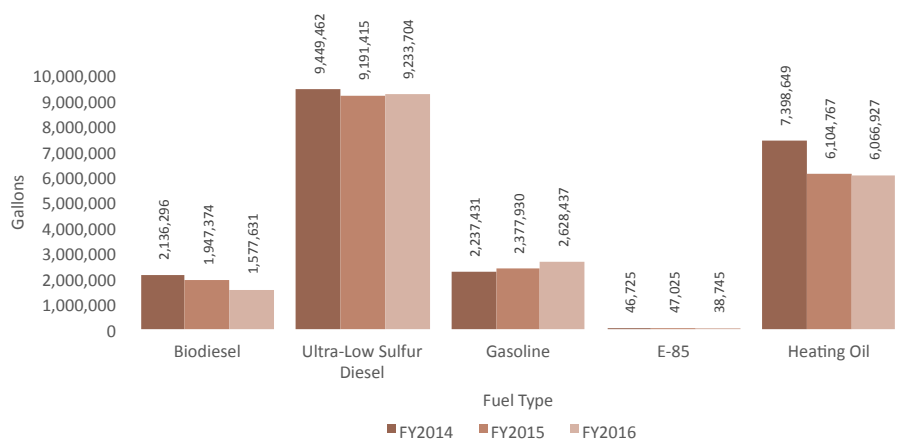
Fuel Efficiency: Total Gallons Consumed

Analyzing fuel consumption patterns enables Fleet and Facility Managers to budget more effectively and use resources more efficiently. This data also will be beneficial as fleet acquisition purchases and facility heating upgrades are considered. Additionally, identifying opportunities for reducing fuel consumption not only benefits the environment via resource conservation and reduced emissions, but also results in true cost-savings through reduced fuel costs.

Chart 9.2B.1 shows relatively constant ultra-low sulfur diesel consumption with the MTA contributing to the majority of fuel consumed via its bus fleet and MARC trains.

Heating oil consumption experienced a significant reduction during the reporting period. While consumption is weather influenced, the MPA converted from oil-fired to natural gas HVAC systems at several facilities which contributed to the reduction. Furthermore, MDTA and MTA have similar construction projects either fully underway or within the design process. Biodiesel and gasoline experienced nearly identical reductions and increases, respectively. This is at least partially attributed to SHA's transitioning of its light and medium-duty fleet from diesel to gasoline for vehicle maintenance issues.

Chart 9.2B.1: Total Gallons of Fuel Consumed, FY2014-FY2016



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TANGIBLE RESULT DRIVER:

Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Hargurpreet Singh, P.E.
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

To track the percentage of waste diverted from the landfill or incineration through recycling.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

Maryland Department of the Environment All State Agency Recycling (All StAR) reporting.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 9.3

Percent of Maryland Recycling Act Materials Recycled

Recycling conserves resources, saves energy, reduces greenhouse gas emissions, reduces the amount of waste sent to landfills, reduces carbon footprint and helps protect the environment.

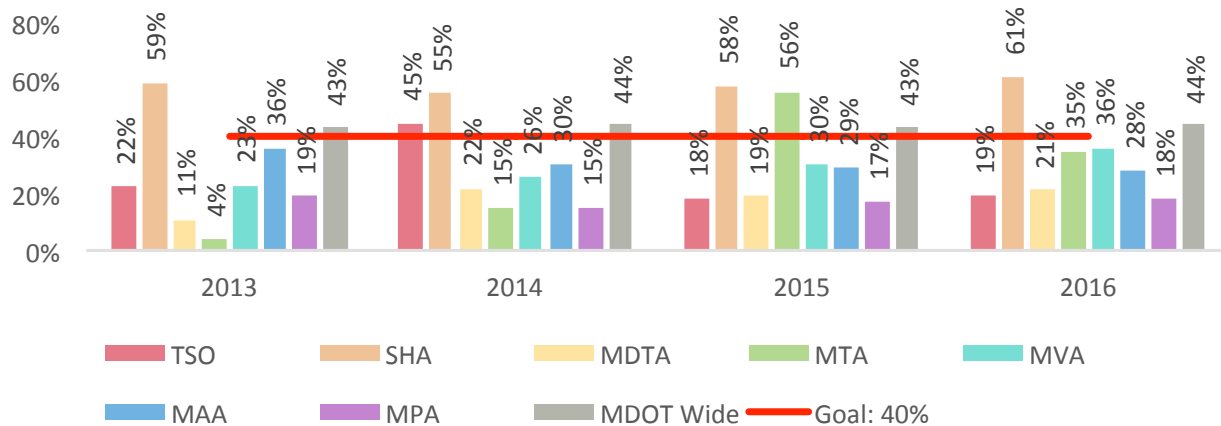
It also demonstrates that MDOT is in compliance with the State of Maryland established recycling and waste reduction goals. And, it is the Right Thing to Do!

Currently, MDOT meets the 40 percent goal set by the Maryland State Legislature. To continue to meet and exceed State legislative recycling goals, each MDOT TBU continues to provide awareness training and to evaluate dumpster size and frequency of trash collection services.

PERFORMANCE MEASURE 9.3

Percent of Maryland Recycling Act Materials Recycled

Chart 9.3.1: Percent of Waste Recycled by TBU CY2013-CY2016



TANGIBLE RESULT DRIVER:

Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Barbara McMahon
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:

To reduce TBU impact on solid waste landfill through recycling/ reuse of steel, asphalt and concrete.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

The data collection methodology will include disposal weights by each TBU's Facility Maintenance and Engineering Departments. The data are and/or should be reported on the annual Non-Maryland Recycling Act Report.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 9.4

Recycled/Reused Materials from Maintenance Activities and Construction/ Demolition Projects

MDOT is committed to reducing its impact on solid waste, non-hazardous landfills, potentially resulting in reduction of the number of waste disposal facilities in Maryland as stated in the Maryland Department of the Environment's "Zero Waste" Action Plan. The TBUs established plans to recycle and/or reuse their solid waste: steel, asphalt and concrete. These materials are to be collected, weighed and recycled/reused. Benefits include saving energy and natural resources, preserving the capacity of landfills, reducing waste disposal costs, generating revenue for materials and reducing pollutants generated by landfill process.

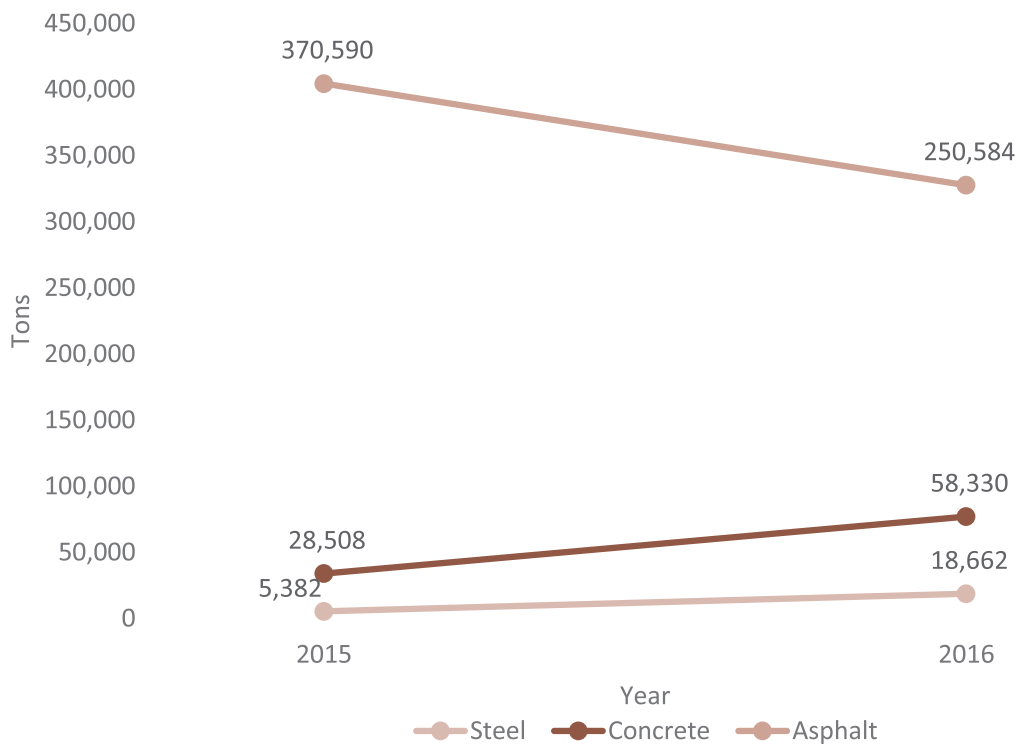
Due to the number and type of construction/demolition activities and projects, MDOT recognizes there may be variability among reporting periods and TBUs, but positive change can still occur by implementing some or all the following:

- Establish central data collection mechanisms and procedures in each TBU.
- Require contractors to segregate, collect, weigh and recycle these materials and provide information to the TBU.
- Ensure commitment to the goal and its positive impact on the environment by making employees and contractors aware of this PM.

PERFORMANCE MEASURE 9.4

Recycled/Reused Materials from Maintenance Activities and Construction/ Demolition Projects

Chart 9.4.1: Recycled/Reused Materials from Maintenance Activities & Construction/Demolition Projects
CY2015-CY2016



Be a Good Steward of Our Environment

TANGIBLE RESULT DRIVER:

Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Robin Bowie
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To provide consistent monitoring of TBU compliance with environmental requirements and to ensure MDOT meets Federal, state and local environmental regulations.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Enterprise Environmental Information Management System.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 9.5

Compliance with Environmental Requirements

MDOT activities and operations are subject to various federal, state, and local environmental regulations. Adherence to the environmental requirements minimizes the potential for activities and operations of transportation facilities to adversely impact the environment and the surrounding communities. Compliance with the environmental requirements that govern MDOT activities and operations is key to being a good steward of the environment and conducting audits is an effective way to monitor this compliance. Tracking audits and reporting audit results further demonstrates MDOT's commitment to environmental stewardship, which benefits not only the natural environment but also the citizens of Maryland.

In 2011, MDOT participated in third party audits as part of an agreement with Environmental Protection Agency (EPA) Region 3. Since the EPA agreement, the frequency of audits conducted has varied for each TBU. The initial round of information revealed a difference in the type (internal vs. external) of audits that have been conducted by each TBU. Several TBUs are in the process of formalizing audit processes and/or procuring audit contracts. Strategies put into place to bring the TBUs into a more consistent reporting method include standardizing audit activities across MDOT, developing a comprehensive environmental compliance audit checklist for use during audits and developing an Enterprise Environmental Management System (EEIMS) module for reporting audit information. MDOT will share audit results on an annual basis.

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TANGIBLE RESULT DRIVER:

Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Laura Rogers
The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To reduce consumption of conventional energy through efficiency measures and renewable energy sources.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Data for MDOT's electricity usage collected online will be evaluated. Data for energy efficiency measures and renewable energy sources utilized by MDOT will be collected from the TBU Energy Managers. Emissions calculated based on the amount of energy used.

NATIONAL BENCHMARK:

Renewable Energy Consumption as a Share of State Total (2014): Oregon, 49.3%; Washington, 47.1%; Maine, 38.3%

American Council for an Energy Efficient Economy ranked Maryland 9 in the 2016 State Energy Efficiency Scorecard. California and Massachusetts tied for number 1.

PERFORMANCE MEASURE 9.6 Energy Consumption

Reducing conventional energy consumption through energy efficiency measures and use of renewable energy can generate revenue, save Maryland taxpayers money, and reduce harmful air emissions while also helping Maryland meet its clean energy and greenhouse gas reduction goals.

The desired trend is to decrease conventional electricity use, cost, and associated carbon dioxide equivalent (CO₂e) emissions. Chart 9.6.1 shows that in CY2017 (January-May), there was a decrease over CY16 (January-May) in usage (28,632 megawatt hours), cost (\$4,898,920), and CO₂e emissions (17,632 metric tons). With renewable energy, the desired trend is to increase renewable energy generation, cost avoidance, and CO₂ avoidance. 9.6.2 shows that in CY2017 (January-May), there was an increase over CY16 (January-May) in generation (131.7 megawatt hours), cost avoidance (\$14,500), and CO₂e emissions avoidance (93 metric tons).

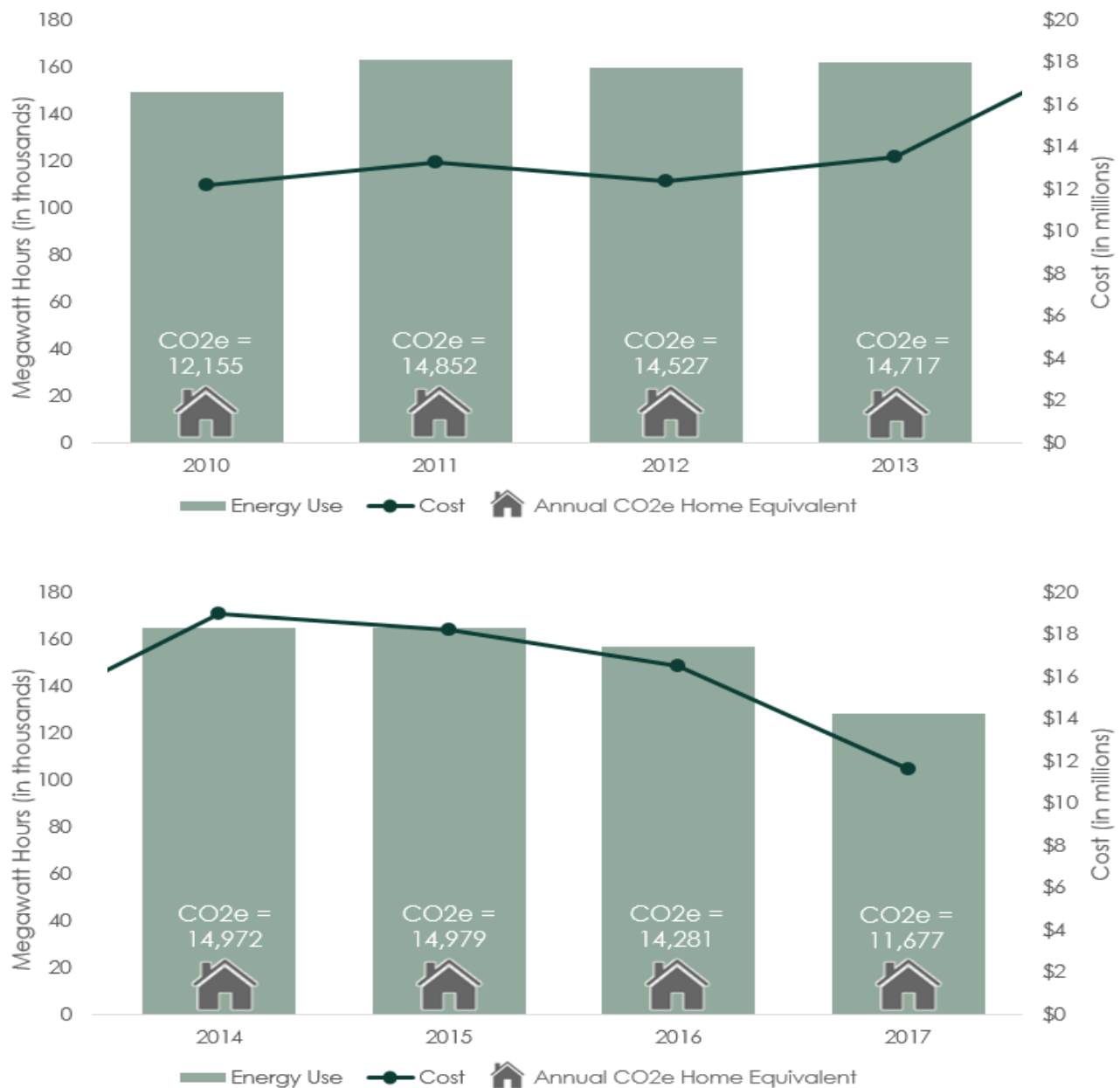
MDOT released a Renewable Energy Development Request for Proposal on June 20, 2017. Proposals are due August 10, 2017. MDOT will use the resulting Master Services Agreement(s) to develop solar, geothermal, and micro-hydropower renewable energy systems quickly and efficiently on MDOT properties throughout the State.

MDOT is undertaking many strategies to increase energy efficiency. Each TBU has completed a comprehensive Energy Plan that details its energy consuming entities, existing and future energy conservation strategies, and future energy conservation goals. Many of the energy conservation measures MDOT implements also realize secondary benefits, such as improved lighting quality, lower operation and maintenance expenses, increased life span of equipment, improved indoor air quality, and enhanced tenant comfort.

MDOT is expanding its services to meet the needs of its customers. The more people use MDOT facilities and the more these facilities increase in size to meet customer needs, the more energy is used. While the desired trend for energy consumption is to go down, simply looking at the amount of energy used does not give an accurate picture of MDOT's energy conservation efforts. For this reason, MDOT is working to develop a standardized Energy Use Index that considers energy use, square footage, and number of users. This Index will give MDOT a better baseline to work from and affect change.

PERFORMANCE MEASURE 9.6 Energy Consumption

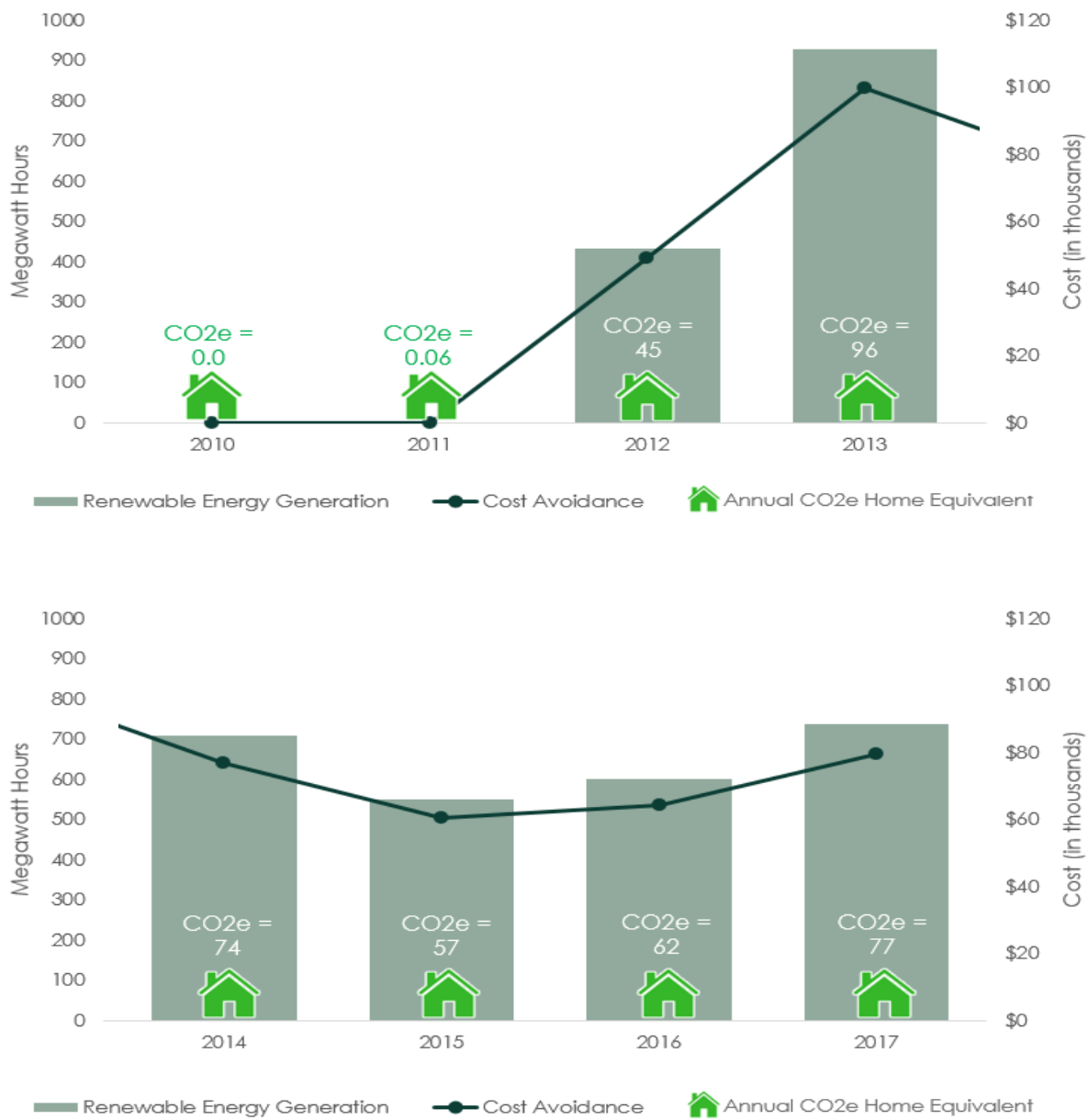
Chart 9.6.1: Total MDOT Conventional Electricity Use, Cost & CO2e Emissions CY 2010-CY2017 (January-May)



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PERFORMANCE MEASURE 9.6 Energy Consumption

Chart 9.6.2: Total MDOT Renewable Energy Generation, Cost & CO2e Avoidance CY2010-CY2017 (January-May)



TANGIBLE RESULT #10

Facilitate Economic Opportunity in Maryland



Maryland's transportation system is essential to the State's economy. An efficient transportation system provides a competitive advantage to businesses in a regional, national and global marketplace. Transportation directly impacts the viability of a region as a place where people want to live, work and raise families, and are critical to attracting a competent workforce.

RESULT DRIVER:

Jim Dwyer

Maryland Port Administration (MPA)

Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

John Thomas
State Highway Administration (SHA)

PURPOSE OF MEASURE:

To track direct, indirect and induced jobs generated by annual construction investments as an indicator of transportation projects contribution to economic return.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

MDOT compiles the necessary data through the annual CTP process.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 10.1

Economic Return from Transportation Investment

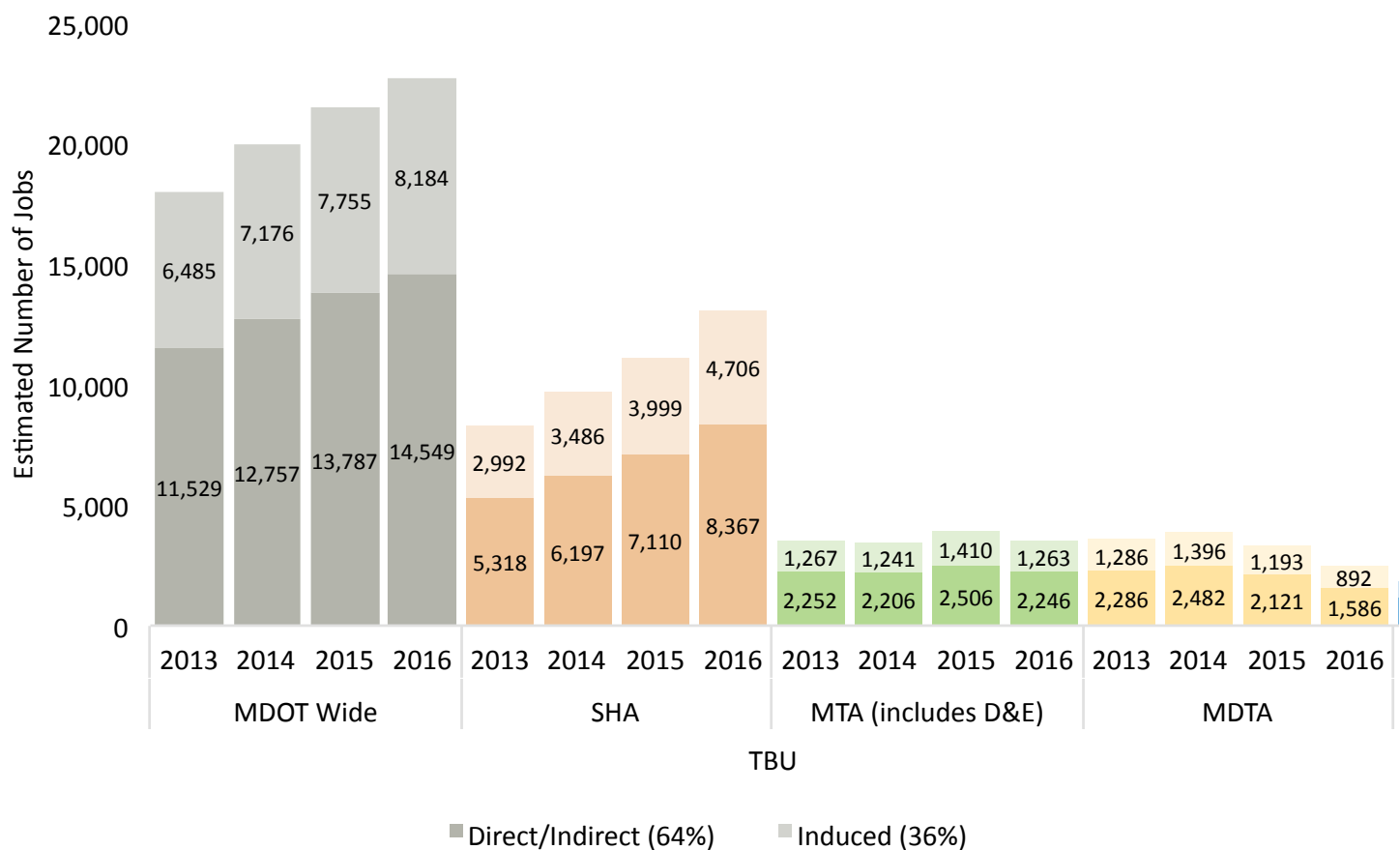
Construction spending on transportation projects has a significant economic impact on people and businesses throughout the state. Economic return from transportation investment is based on the estimated number of jobs created as a result of MDOT investments in capital projects. In FY2016, it is estimated that over 22,500 jobs were created by MDOT. The annual Consolidated Transportation Program (CTP) is used to identify planned investments by each MDOT TBU on major construction projects. Construction projects generate three types of jobs: direct jobs are those generated by the actual construction activity; indirect jobs are supported by the business purchases necessary for the project's construction; and induced jobs are a result of local purchases of goods and services by the direct employees. Capital investments in transportation infrastructure support economic activity across a wider region, beyond the specific project location.

Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE 10.1

Economic Return from Transportation Investment

Chart 10.1.2: Estimated Number of Jobs Created by TBU Capital/Construction Programs FY2013-FY2016 (Actual FY Spending)

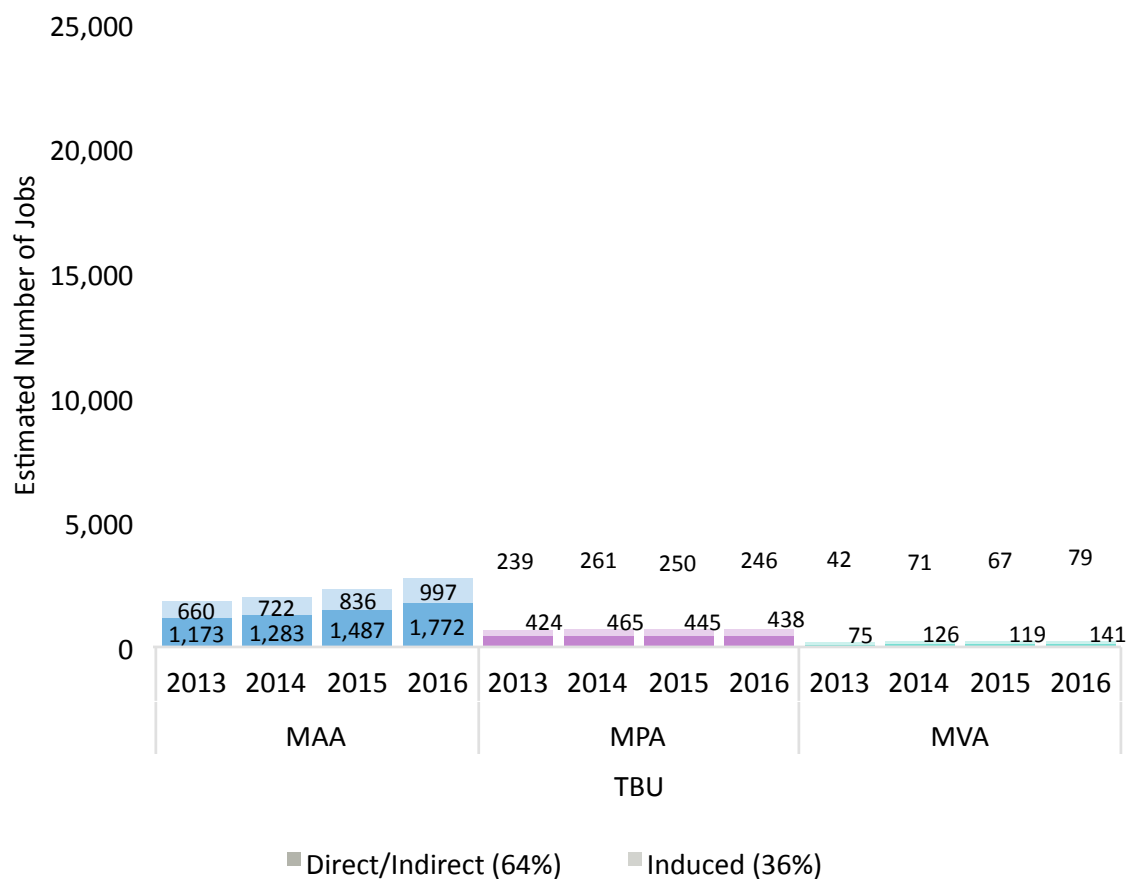


Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE 10.1

Economic Return from Transportation Investment

Chart 10.1.2: Estimated Number of Jobs Created by TBU Capital/Construction Programs FY2013 to FY2016 (Actual FY Spending)



Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

John Thomas
State Highway Administration (SHA)

PURPOSE OF MEASURE:

To compare Maryland against other state's economic activity based on access to and condition of the infrastructure.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Using publicly available data, CNBC assesses every state's infrastructure including value of goods movement; availability of air travel; road and bridge conditions; and commute times.

NATIONAL BENCHMARK:

CNBC annual ranking

Web link: <http://www.cnbc.com/2016/07/12/americas-top-states-for-business-2016-the-list-and-ranking.html>

PERFORMANCE MEASURE 10.2

Maryland's Ranking in National Transportation Infrastructure Assessment

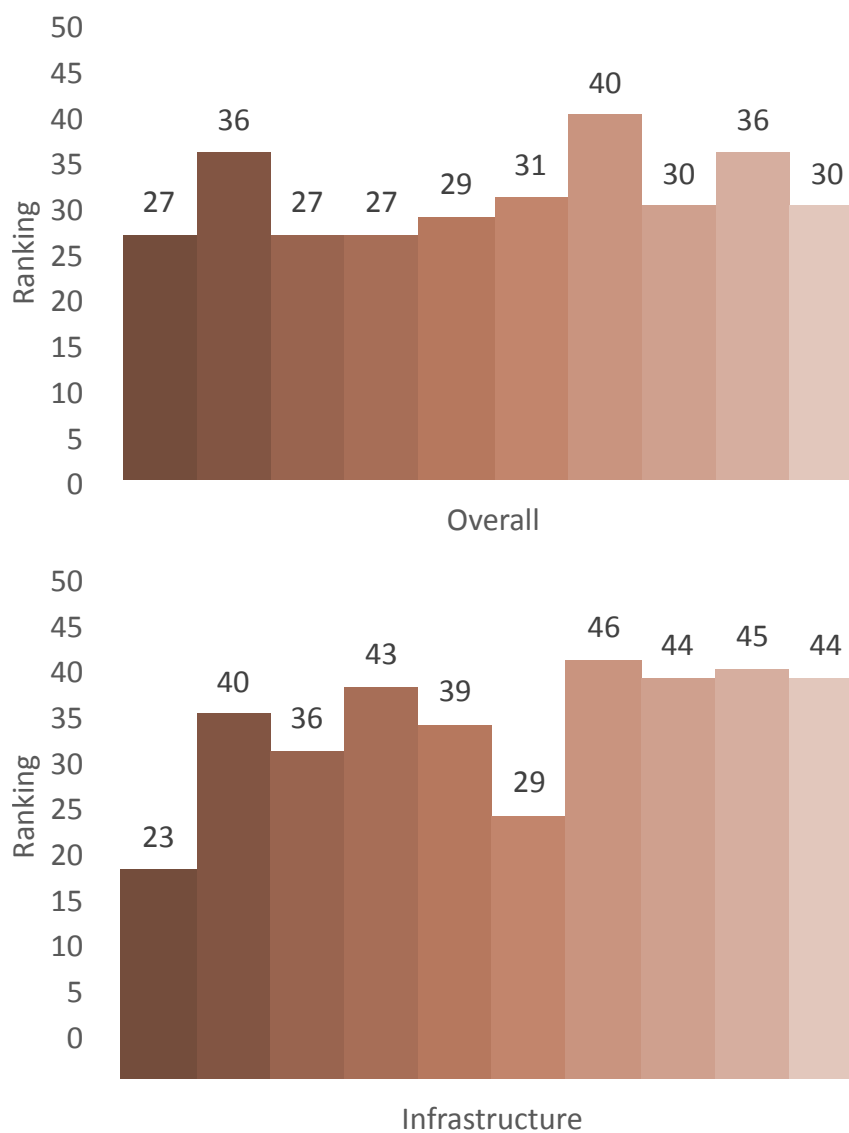
The CNBC business news media group uses publicly available data on 60 measures of competitiveness to score each state. The metrics are organized into 10 broad categories and weighted based on how frequently each is used as a selling point in state economic development marketing materials. The infrastructure category is a measure of a state's transportation system and supply of safe drinking water. It includes metrics to compare the value of goods shipped by air, waterways, roads and rail within a state, the quality of roads and bridges, and commute times. The annual rankings can be used as a national benchmark for economic activity over time as a means for comparing Maryland's standing versus other states. From 2015 to 2016, Maryland's overall score moved up from 36 to 30 out of 50 states. As of 2016, Maryland moved up slightly from 2015 in "infrastructure" (44 out 50 in 2016 up from 45 in 2015) but remains in the bottom 10 because of the inclusion of mobility calculations in the metric.

Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE 10.2

Maryland's Ranking in National Transportation Infrastructure Assessment

Chart 10.2.1: America's Top States for Business
Annual Rankings for Maryland in Select Categories CY2007-CY2016



■ 2007 ■ 2008 ■ 2009 ■ 2010 ■ 2011 ■ 2012 ■ 2013 ■ 2014 ■ 2015 ■ 2016

Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer

Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Juan Torrico

Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To assess freight mobility and the amount and value of freight originating and terminating in Maryland as an indicator of how supportive transportation infrastructure is for freight and Maryland's economy.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

U.S. Department of Transportation Freight Analysis Framework (FAF4) Version 4 and MPA.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 10.3A

Freight Mobility: Freight Analysis Framework (FAF) Tonnage and Value of Freight

Efficient and interconnected multimodal freight movement is essential to the State's economy because freight is the economy-in-motion. Maryland manufacturers depend on the freight system to move raw materials and finished goods between production facilities, distribution centers and retail outlets in Maryland and throughout the U.S. and the world. Freight-dependent industries account for over one million jobs in Maryland.

- Water and rail are well-suited to cost-effectively haul goods long distances. Commercial ships utilize the Port of Baltimore to transfer waterborne goods to land, at which point trucks and rail haul these imported goods to communities around the nation.
- Trucks carry nearly every type of commodity, from consumer products to chemicals to machinery.
- High value and time-sensitive products are commonly shipped via air. The top air freight commodities shipped out of MAA facilities include mail, machinery and transportation equipment.

MDOT is currently updating the Strategic Goods Movement Plan to address the latest Fixing America's Surface Transportation (FAST) Act requirements.

Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE 10.3A

Freight Mobility: Freight Analysis Framework (FAF) Tonnage and Value of Freight

Table 10.3A.1 Freight Originating and Terminating in Maryland 2016

METHOD FOR MOVING FREIGHT	TOTAL VALUE (BILLIONS)	TOTAL TONNAGE (THOUSANDS)
Air*	\$13.4	141
Pipeline & Other**	\$72.5	39,488
Rail*	\$15.1	26,206
Truck*	\$318.1	214,317
Water***	\$49.9	31,834
All Freight	\$469.0	311,986

*Source: U.S. Department of Transportation Freight Analysis Framework (FAF4). Other, Multiple Modes and Mail, Rail, and Truck value and tonnage data is estimated based on FAF4 data. The data is based off of 2012 actual data collected by FHWA and is factored by FHWA through 2015. MDOT adjusts the yearly by a 2% annual growth rate that reflects a conservative estimate of domestic and international freight growth given current economic conditions.

**Pipeline and Other freight consists largely pipeline, postal and courier shipments weighing less than 100 pounds and other intermodal combinations. Represents a combination of FAF4 Pipeline, Other and Unknown and Multiple Modes and Mail categories.

*** International cargo through the Port of Baltimore in 2016, source: MPA.

Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Juan Torrico
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To track public and private international waterborne cargo activity in the Port of Baltimore, which is a strong indicator of jobs generated and economic activity.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

U.S. Census data via website – USA Trade Online.

NATIONAL BENCHMARK:

Mid-Atlantic ports' international cargo.

PERFORMANCE MEASURE 10.3B

Freight Mobility: Port of Baltimore International Cargo Market Share and Rankings

Cargo through the Port of Baltimore is an indicator of the region's commercial health, because freight is the economy in motion; if freight isn't moving, then neither is the economy. International tonnage in Baltimore increased 4.3 percent in the 1st quarter due to strong export coal and container volumes. The Port's general cargo was up 5.7 percent in the 1st quarter, and bulks were up 3.5 percent.

Although Baltimore's international cargo tonnage increased in the 1st quarter compared to the same period of the prior year, market share decreased due to greater tonnage increases in Virginia (coal exports) and the Delaware River ports (crude oil, cocoa beans, slag, and gypsum imports).

MPA is an active partner with the Corps of Engineers to ensure the navigation channels are dredged to allow the world's fleets easy access to the port.

In the Mid-Atlantic region, the Port of Baltimore ranks:

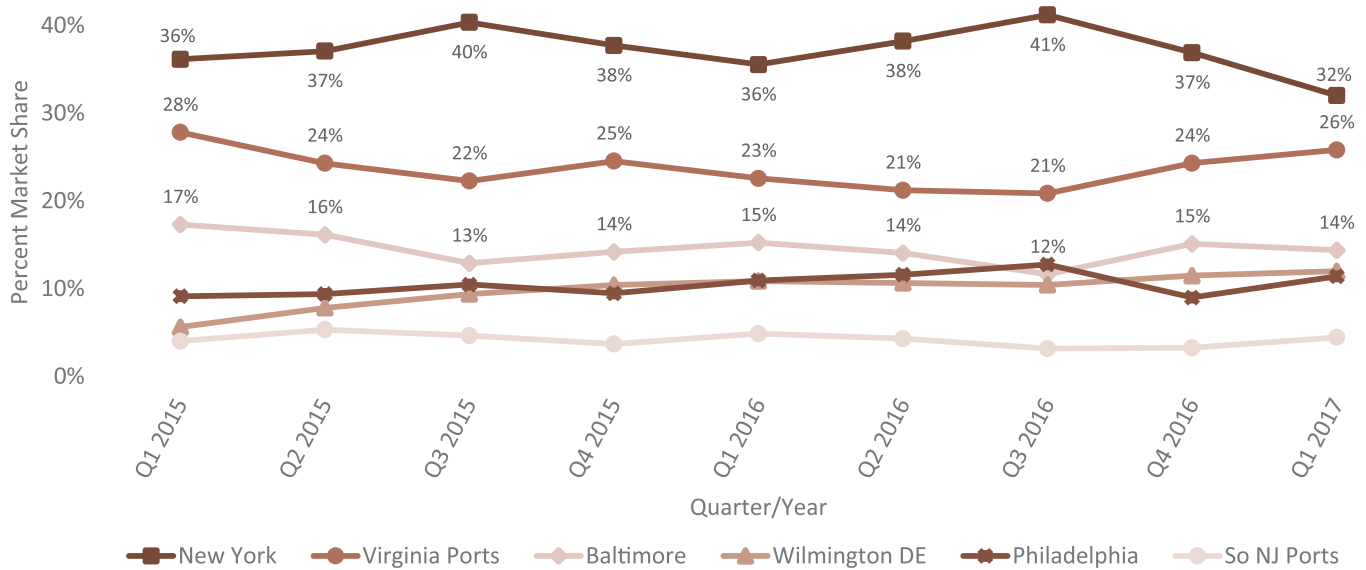
- 1st in Autos; and Roll-on/Roll-off heavy equipment;
- 1st in Imported Sugar, and Salt
- 2nd in Exported Coal
- 3rd in Containers
- 3rd in Total International Cargo.

Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE 10.3B

Freight Mobility: Port of Baltimore International Cargo Market Share and Rankings

Chart 10.3B.1: Market Share, Mid-Atlantic Ports International Waterborne Cargo CY2015-CY2017



Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Deborah Rogers
Maryland Vehicle Administration (MVA)

PURPOSE OF MEASURE:

Data shows level of activity at Public Marine Terminals.

FREQUENCY:

Monthly

DATA COLLECTION METHODOLOGY:

Data obtained from MPA cargo Billing Reporting and Statistical System (BRASS). Historical data is available back to 1998.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 10.3C

MPA Total General Cargo Tonnage including Containers, Autos, RoRo and Imported Forest Products

As a rule of thumb, general cargo generates more jobs per ton than bulk commodities. Although international general cargo is one-third of the Port's total tonnage, it accounts for 96 percent of the cargo's value, and the State's public terminals handle the vast majority of general cargo. This is why it is an important measure to track. The MPA set a new record in fiscal year 2016 of 9.8 million tons, and another record was set in calendar year 2016 at 10.1 million tons.

There was only one month in 2016 that was under 800,000 tons, and a new record was set in January 2017 at 922,677 tons. Containers showed the strongest growth, followed by imported paper. Although low commodity prices on both agricultural products and minerals keep sales of farm, construction and mining equipment suppressed and the strong US dollar discourages exports, Baltimore remains the top Ro/Ro port on the East Coast.

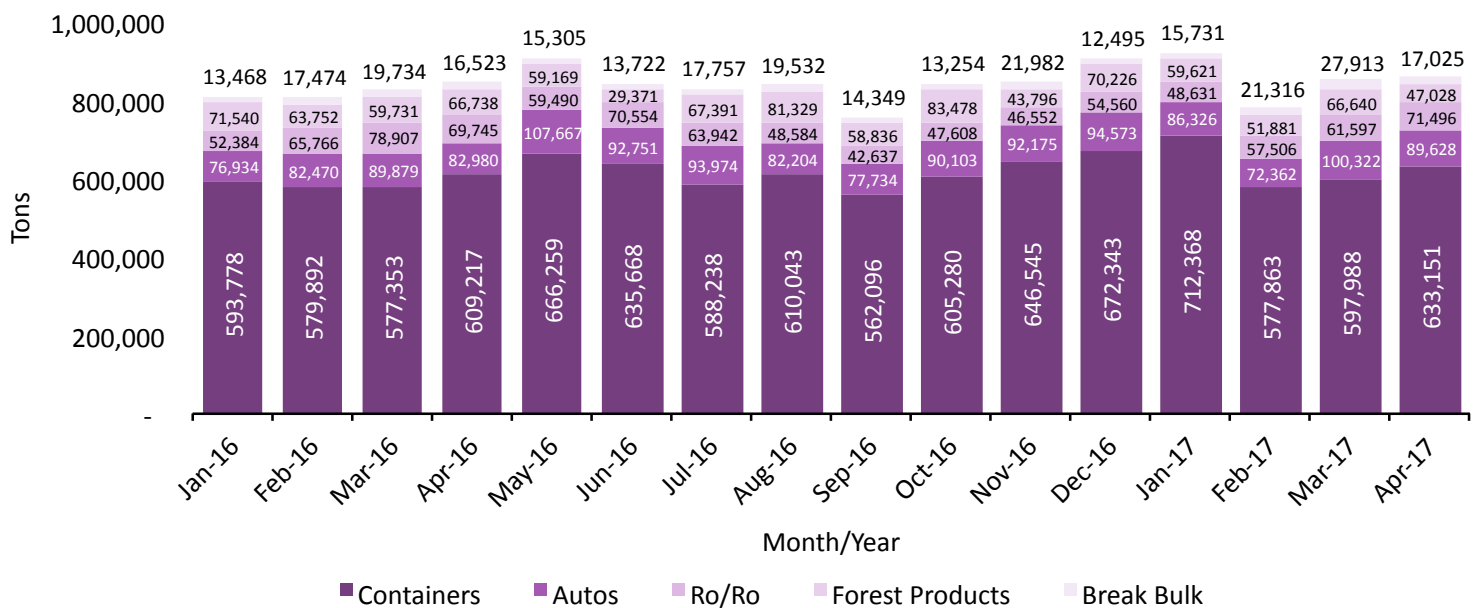
MPA conducts a multi-pronged effort to sustain and expand cargo volumes, e.g., emphasizing long term contracts with favorable rates; marketing for the whole Port; facilitating ways to improve efficiency at Seagirt Marine Terminal to increase truck productivity; managing the capital program to focus on system preservation to keep current customers; and enhancements to keep pace with the evolving global logistics and ever increasing fleet size and vessel sharing agreements.

Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE 10.3C

MPA Total General Cargo Tonnage including Containers, Autos, RoRo and Imported Forest Products

Chart 10.3C.1: MPA General Cargo Tonnage CY2016-CY2017



Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Rafael Espinoza
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

To minimize the number of weight-posted bridges to facilitate the improvement in movement of goods to businesses, communities and the economy.

FREQUENCY:

Annually (in July)

DATA COLLECTION METHODOLOGY:

Data reflects Federal reporting in April of each year. The number of bridges on the State-Owned System that are weight-posted are reported in the Structure Inventory and Appraisal (SI&A) report. That number is then divided by the total number of SHA and MDTA bridges, resulting in the calculation of the percentage of weight-posted bridges on the State system.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 10.4

Number and Percentage of Bridges on the State-Owned System that are Weight-Posted

Weight-posted bridges are those that are unable to safely carry the maximum weight of a legally loaded vehicle (80,000 lbs. for tractor trailers and 70,000 lbs. for dump trucks). Weight-posted bridges adversely affect movement of goods for businesses and communities, and can impact daily commercial operations and business growth. Allowing all legally-loaded vehicles to traverse the bridges on the State system is essential to commerce in Maryland, facilitating the movement of goods and provision of services efficiently throughout the State. Minimizing weight-posted bridges ensures the safety of the traveling public and facilitates emergency response time by avoiding the need for detour routes. If a bridge cannot safely carry all legal loads, due to its present condition or original design criteria, it will be evaluated and a vehicle weight will be established that it can safely carry. This lower vehicle weight (which is less than the legal weight) will be placed on signs alerting all potential users of the maximum load that the bridge should carry.

Whenever inspections of weight-posted bridges or structurally deficient bridges indicate that repairs are necessary to prevent a weight posting or the lowering of the existing allowable weight restriction, the work to prevent this will be given top priority, and where possible, complete actual construction 18 months from the date when the need for the work was established.

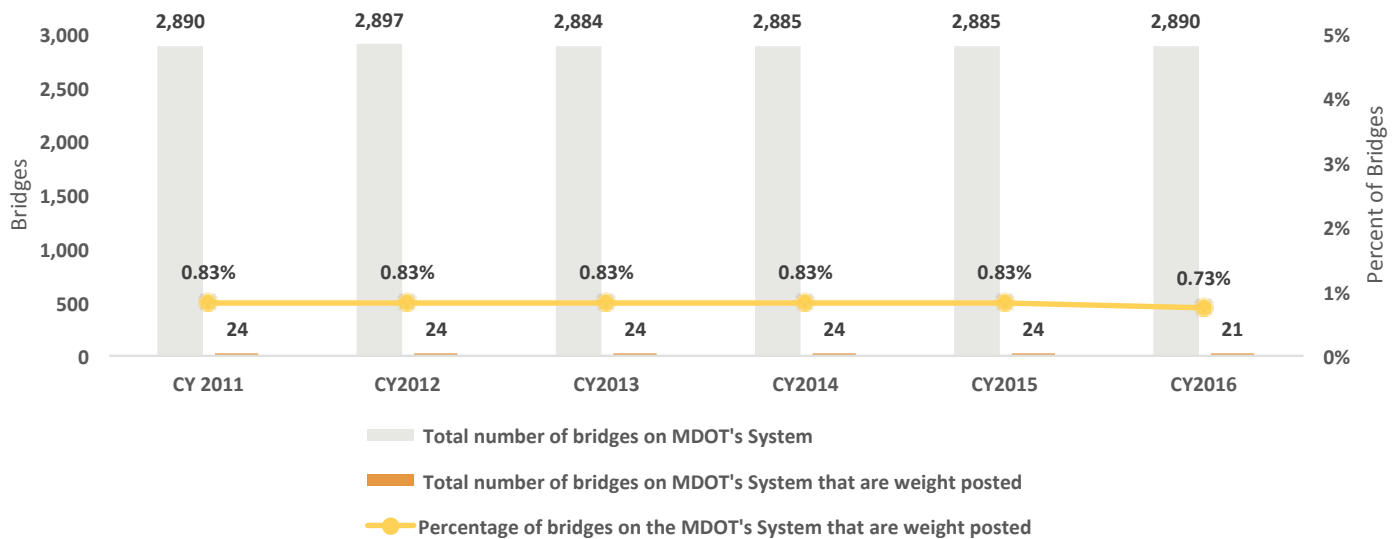
Less than 1 percent of SHA and MDTA bridges have a weight restriction.

Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE 10.4

Number and Percentage of Bridges on the State-Owned System that are Weight-Posted

Chart 10.4.1: Number and Percentage of Bridges on MDOT's System that are Weight-Posted CY2011-CY2016



Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Corey Stottlemeyer
The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To quantify the impacts of changes in the transportation network on the state's economy due to completed transportation projects providing businesses with access to labor, customers, and suppliers. Improved access leads to greater opportunities.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

As transportation projects are completed and the transportation network is enhanced, changes in travel demand and user choice will be modeled using a transportation economic impact model, which is a multimodal measure.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 10.5

Change in Market Access due to Improvements in the Transportation Network

Improving access within Maryland's transportation network is a critical role MDOT plays in facilitating economic opportunity for the citizens of Maryland, its businesses and those who come to the State to do business. Currently, MDOT does not measure the impact of changes to the transportation network and its effect on market access. This measure would allow MDOT to look at how improvements in roads and multimodal access is affecting Maryland's economy and assess whether businesses have better access to labor, customers, suppliers and international markets.

This measure includes potential impacts from:

- Business Relocation – Improved market access has the effect of strengthening an economy's competitiveness in attracting and retaining business relative to other locations.
- Productivity Growth – Increasing an economy's accessibility and connectivity generates agglomeration benefits from returns to scale in production, knowledge spillovers, and better matching of suppliers and employees to businesses.
- Increased Import/Export Activity – Improving an economy's access to international gateways can enable new import/export activity.

The Multimodal Process Improvement Team for this measure has met and the tool used to measure the market access has been secured. MDOT has developed a standardized approach to modeling projects and is running test simulations to ensure consistency.

Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Corey Stottlemeyer
The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To quantify the impacts of changes in the transportation network on the productivity of people and businesses in Maryland.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

As transportation projects are completed and the transportation network is enhanced, changes in travel demand and user choice will be modeled using a transportation economic impact model; this is a multimodal measure.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 10.6

Change in Productivity due to Improvements in the Transportation Network

Productivity gains are essential to economic growth as businesses and people have to do more with fewer resources. The transportation network is similar to the Internet and other innovations that allow people and businesses to be more productive. Currently, MDOT does not measure the impact of changes to the transportation network and its effect on productivity.

Using a transportation economic impact model, MDOT will be able to assess four types of productivity benefits to ensure it helps to facilitate business opportunities throughout Maryland:

1. Travel cost savings;
2. Reliability benefits for industry;
3. Delivery logistics and supply chain benefits; and
4. Agglomeration effects on access to specialized skills and services.

The Multimodal Process Improvement Team for this measure has met and the tool used to measure the productivity has been secured. MDOT has developed a standardized approach to modeling projects and is running test simulations to ensure consistency.

Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

John Thomas
State Highway Administration (SHA)

PURPOSE OF MEASURE:

To estimate benefits to highway users due to CHART incident management, major/minor capital improvements, signal retiming, HOV lane, and park-and-ride operations as an indicator of cost savings due to reduced delay.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

MDOT collects and maintains data on travel speeds, traffic volumes, incidents, and facility usage to develop user cost savings.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 10.7

Total User Cost Savings for the Traveling Public due to Congestion Management

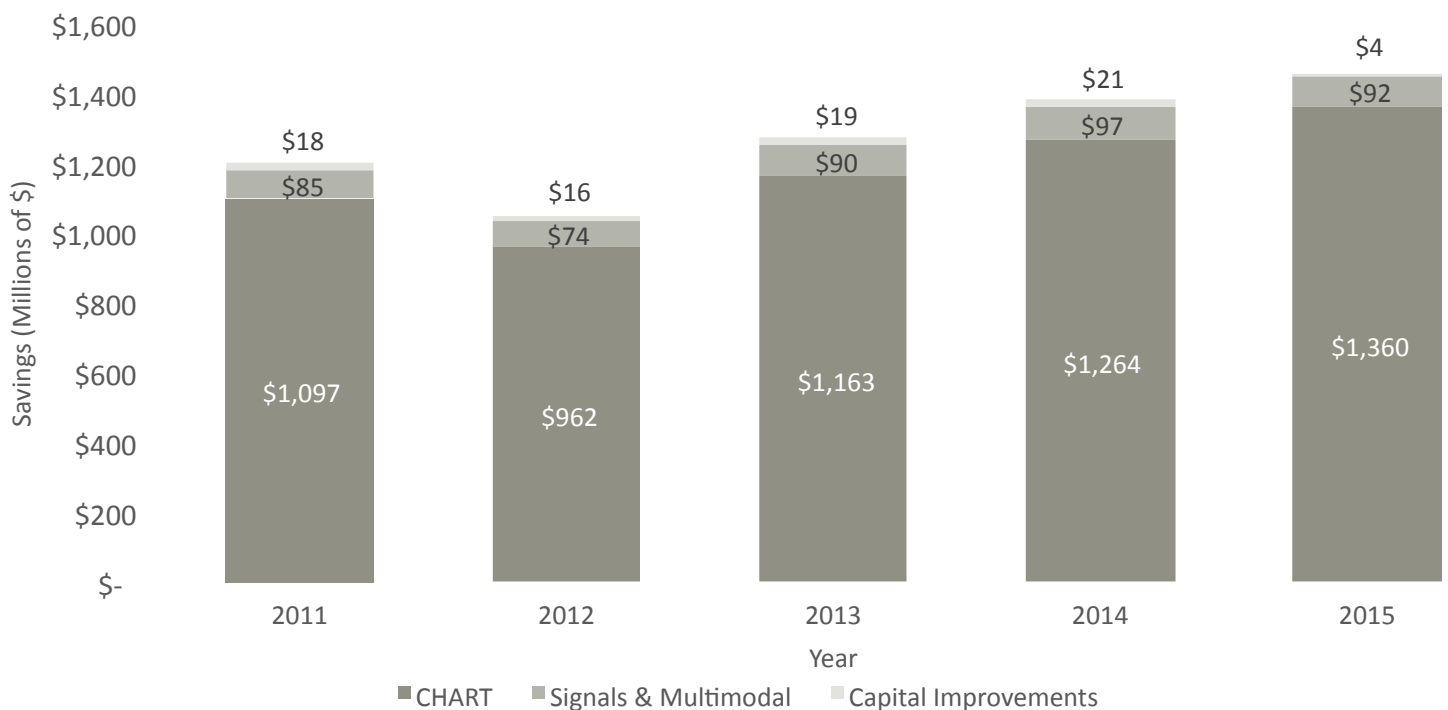
The SHA and MDTA implement various projects, programs and policies to reduce congestion and enhance mobility on their facilities. The SHA focuses on both recurrent and non-recurrent aspects of congestion. These include CHART, Incident Management and Intelligent Transportation Systems (ITS) programs, major/minor roadway geometric improvements, traffic signal system optimization, and multimodal strategies like HOV lane operations and park-and-ride facilities. The congestion management solutions implemented by SHA and MDTA result in significant user cost savings (e.g. delay reduction, fuel savings) to automobile and truck traffic. MDOT continues to implement operational strategies, including a Transportation Systems Management and Operations (TSM&O) Strategic Plan, and provides Traffic Incident Management training to partner organizations, while also exploring local, regional and state incident management coordination opportunities. Reductions in travel times directly result in roadway user cost savings.

Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE 10.7

Total User Cost Savings for the Traveling Public due to Congestion Management

Chart 10.7.1: Annual User Cost Savings Through MDOT Congestion Management Efforts CY2011-CY2015



Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

John Thomas
State Highway Administration (SHA)

PURPOSE OF MEASURE:

To quantify the degree of congestion experienced by highway users when traveling during peak hours.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Includes private sector vehicle probe speed data, and traffic count data on average weekdays.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 10.8

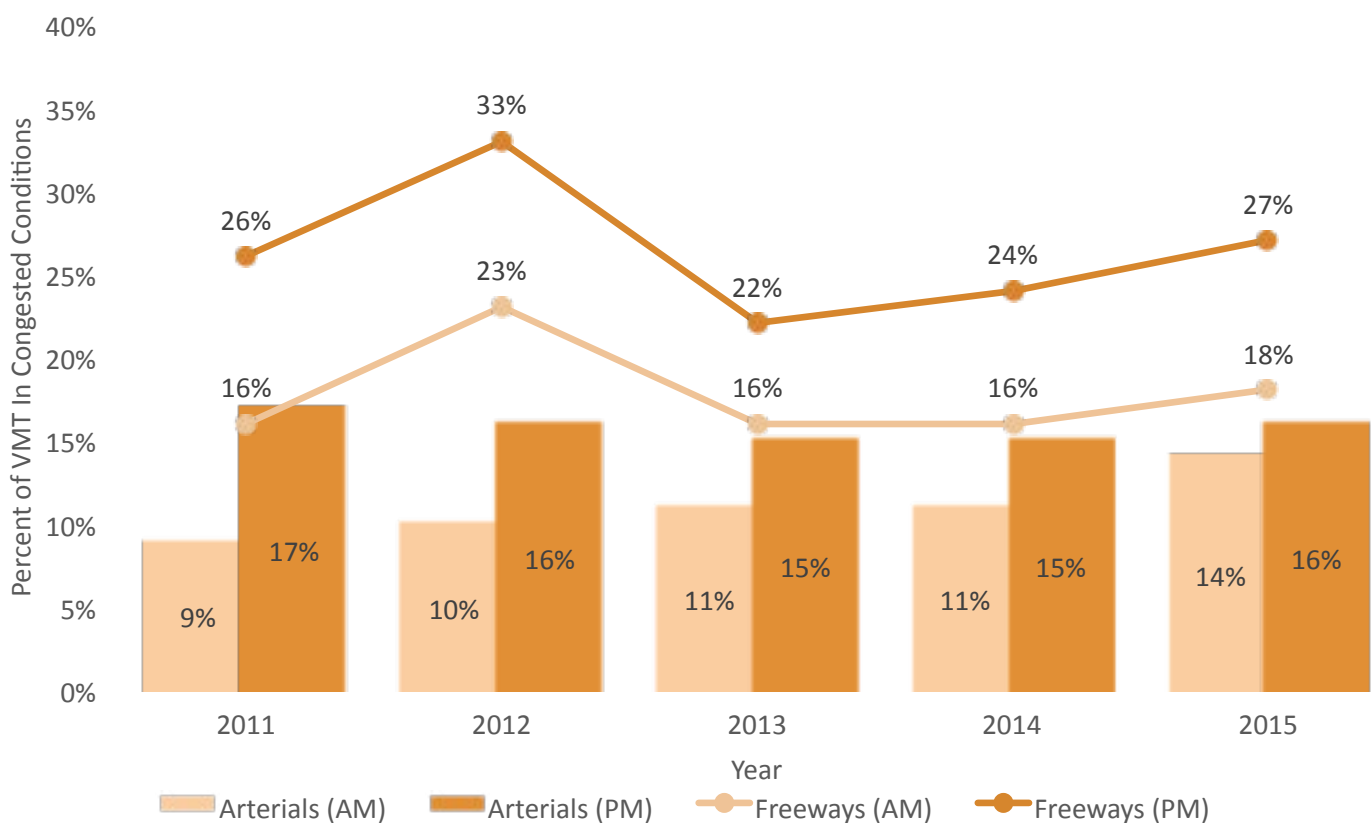
Percent of VMT in Congested Conditions on Maryland Freeways and Arterials in the AM/PM Peak Hours

This measure represents the percentage of peak hour VMT on Maryland highways that occur in congested conditions. Congestion on freeways is said to occur when the travel time index (TTI) ratio is greater than 1.3 (traffic travels at 25 percent slower than the free flow speed). Congestion on arterials is said to occur when the traffic Level of Service (LOS) is rated E, or worse, on a scale of A through F. These congestion metrics are a good indicator of customer experience on roadways in morning and evening peak hours. The share of VMT on the freeways/expressways which occurred in congested conditions is generally higher than the share for arterial roadways. Peak hour congestion is dominated by non-discretionary trips including goods movement, commute and school trips. Reducing congestion and enhancing the reliability of peak hour trips make Maryland more attractive for economic development and provide users with a high quality safe, efficient and reliable highway system.

PERFORMANCE MEASURE 10.8

Percent of VMT in Congested Conditions on Maryland Freeways and Arterials in the AM/PM Peak Hours

Chart 10.8.1: Peak Hour Congested VMT Trends CY2011-CY2015



Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Jack Cahalan
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To demonstrate Martin State Airport's share of the general aviation business in the Baltimore region.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Operations Network Data compiled by the Federal Aviation Administration.

NATIONAL BENCHMARK:

General aviation activity at BWI Marshall's general aviation facility.

PERFORMANCE MEASURE 10.9A

Market Share: Martin State Airport's Regional Market Share

Martin State Airport is a general aviation facility located in eastern Baltimore County, Maryland serving the general aviation needs of the Baltimore region. It is owned and operated by the State of Maryland. This performance measure gauges the percentage of itinerant general aviation activity at Martin State Airport as compared to the itinerant general aviation activity at BWI Marshall. Itinerant general aviation activity is defined as a flight where its origin or destination takes it beyond the electronic control of the local control tower. This measure captures the amount of discretionary use of Martin State Airport by the business and general aviation community flying in and out of the Baltimore region.

The volume of itinerant general aviation operations is an indicator of how much business traffic Martin State Airport is, or is not, attracting. The more itinerant operations, the more in potential fuel sales and other support operations occur at Martin State Airport. Such operations generate revenue and support existing jobs at, and around, the airport. Strong market share also indicates Martin State is adequately performing one of its primary missions, serving as a "reliever airport" for BWI Marshall. A reliever airport is one that attracts general aviation traffic away from a region's primary commercial airport, reducing demand on the congested airspace surrounding the commercial airport.

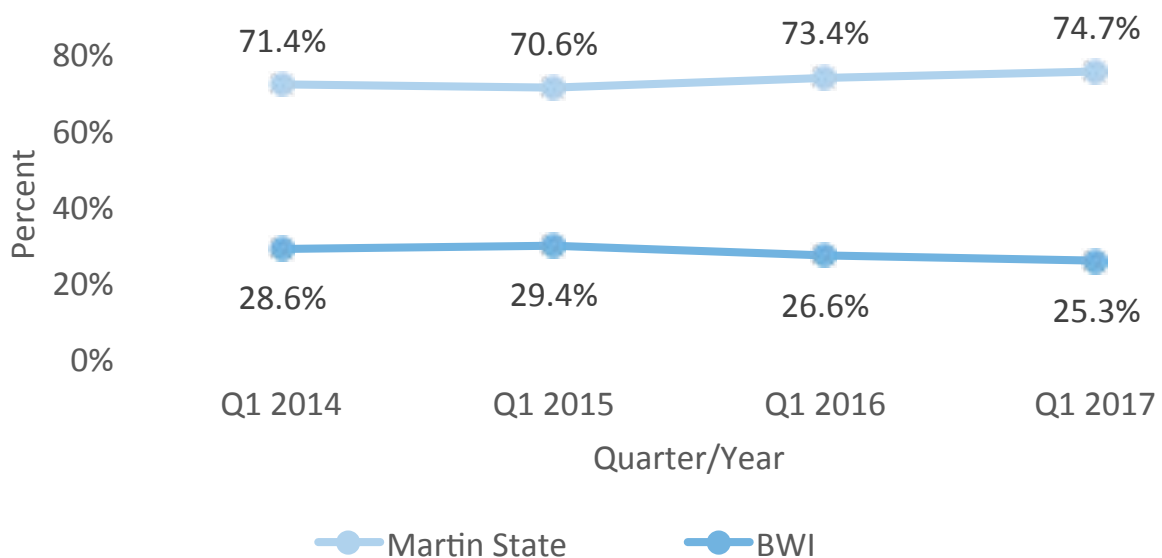
Martin State Airport is performing well. From Q1 2015 to Q1 2017, Martin State demonstrated strong growth in market share of itinerant general aviation operations, increasing from 70 percent to nearly 75 percent while general aviation activity at BWI Marshall declined from 29 percent to 25 percent.

Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE 10.9A

Market Share: Martin State Airport's Regional Market Share

Chart 10.9A.1: Percent of Itinerant General Aviation Activity Q1 CY2014-CY2017



Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Jack Cahalan
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To demonstrate the percent of scheduled nonstop destinations served by BWI Marshall against the total number of nonstop destinations served by the region's three major airports.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Air service schedule analysis.

NATIONAL BENCHMARK:

Reagan National Airport;
Dulles International Airport

PERFORMANCE MEASURE 10.9B

Market Share: Percent of Nonstop Markets Served Relative to Benchmark Airports

The Washington-Baltimore region is served by three primary airports. They include: Baltimore/Washington International (BWI) Thurgood Marshall Airport; Ronald Reagan National Airport; and Dulles International Airport. More than 25 million passengers flew through BWI Marshall Airport in 2016, an all-time-record for passenger traffic. In fact, BWI Marshall has posted 18-straight monthly passenger records through December 2016. International passenger traffic reached 1,233,466 million passengers in 2016, also a new record, and 2016 was the second-straight year with more than one million international passengers.

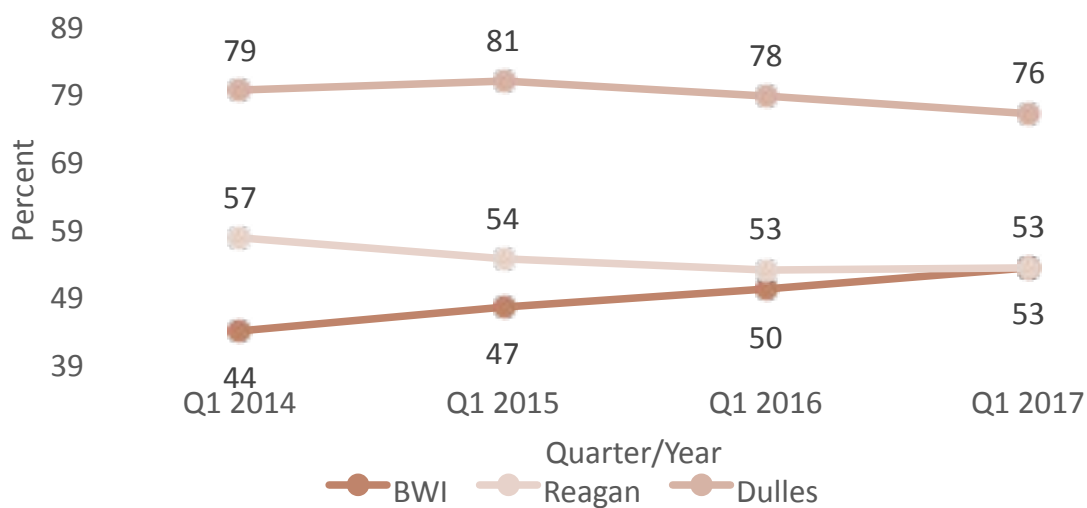
The number of nonstop destinations an airport serves is an important performance metric, as nonstop service is preferred by passengers. Due to the seasonal nature of air travel, the way to evaluate performance is by comparing how an airport performs in a particular quarter one year compared to that same quarter in another year. Chart 10.9B.1 demonstrates that BWI Marshall has produced a steady increase in nonstop destinations in the first quarter of the calendar year from 2014 to 2017. The number of nonstop destinations grew to 53 percent of all markets served by the region's three airports in Q1 2017 compared to 44 percent of all markets served in Q4 2014. Today, BWI Marshall provides more than 300 daily nonstop departures and nonstop service to more than 80 domestic and international destinations.

Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE 10.9B

Market Share: Percent of Nonstop Markets Served Relative to Benchmark Airports

Chart 10.9B.1: Percent of Nonstop Markets Served Relative to Benchmark Airports in Q1 CY2014-CY2017



Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Jack Cahalan
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

To determine market share in Baltimore/Washington region by tracking number of passengers and departing flights at BWI Marshall compared to other airports in the region.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Air service schedule analysis.

NATIONAL BENCHMARK:

Reagan National Airport;
Dulles International Airport

PERFORMANCE MEASURE 10.9C

Market Share: Percent of Passengers and Departing Flights Relative to Benchmark Airports

As seen in Charts 10.9C1 and 10.9C.2, BWI Marshall Airport's percentage of departing flights steadily increased between first quarter of 2014 and the same time period in 2017. This positive performance is due primarily to continued growth by Southwest, jetBlue, Spirit and Allegiant Airlines. In the first quarter of 2017 BWI Marshall continued to serve more passengers than any other airport in the region.

BWI is first in market share of passengers and third in market share of number of departing flights. This is because Reagan National handles a great deal of commuter flights which use smaller aircraft and carry fewer passengers. This fact results in a larger number of overall departures at Reagan than BWI Marshall. This "commuter factor" is also present, to a lesser degree, at Dulles.

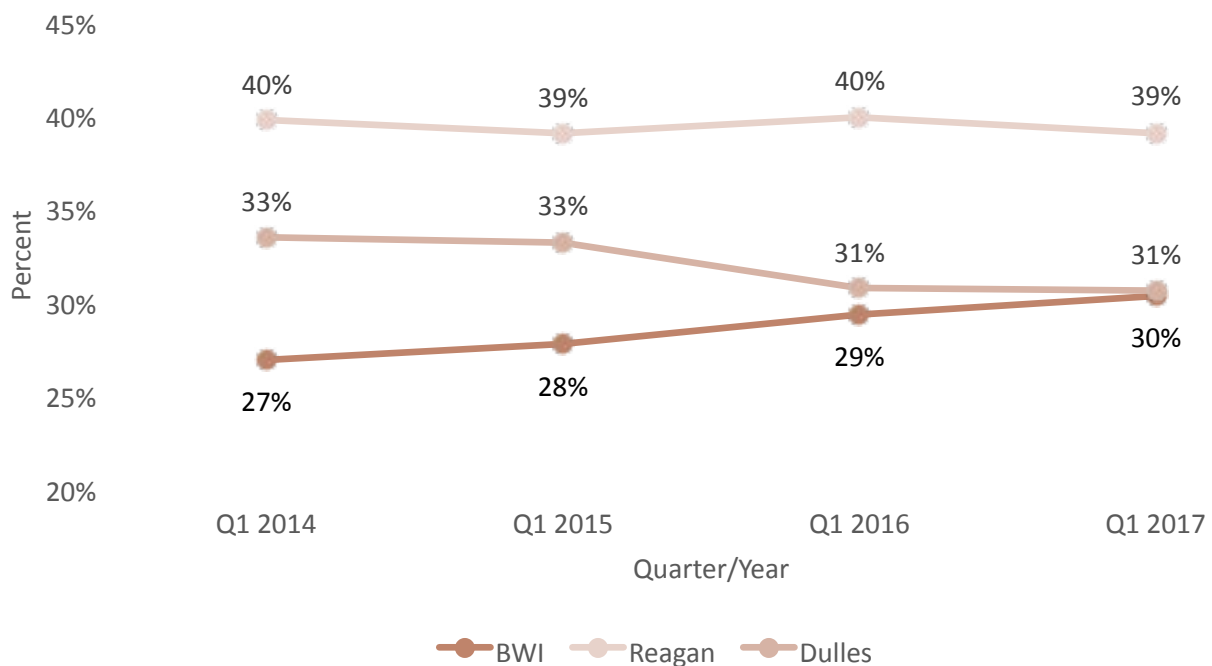
By contrast, BWI Marshall handles relatively few commuter flights. The overwhelming majority of flights at BWI Marshall involve regularly scheduled, longer distance flights using standard size commercial aircraft like the Boeing 737 flown by Southwest Airlines, which is responsible for 70 percent of the traffic at BWI Marshall. As an example, a commuter jet may carry 50 passengers where a 737-800 model aircraft flown by Southwest will carry 175.

Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE 10.9C

Market Share: Percent of Passengers and Departing Flights Relative to Benchmark Airports

Chart 10.9C.1: Percent Total Daily Departures at the Region's Airports Q1 CY2014-CY2017



Facilitate Economic Opportunity in Maryland

TANGIBLE RESULT DRIVER:

Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:

Glen Carter
The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To improve customer service with a predictable, consistent and transparent process for obtaining an access permit for development in Maryland.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Reviews, permits and delivery times are tracked in the Access Management Database.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 10.10

Percent of Roadway Access Permits Issued within 21 Days or Less

Access permits help promote safe and efficient roads for travel while supporting economic development and growth in jobs and businesses. The issuance of access permits, and the resulting construction of roadway and entrance improvements by developers, are some of the last steps before opening a business or selling commercial or residential properties for occupancy. This activity contributes to the creation of new jobs, businesses and development/redevelopment opportunities.

This measure tracks MDOT-SHA efforts to improve customer service with a predictable, consistent and transparent process for obtaining an access permit. The performance target is 100 percent of permits issued within 21 days (after receipt of a complete application package). On average over the last five years, 105-125 completed applications are received each year.

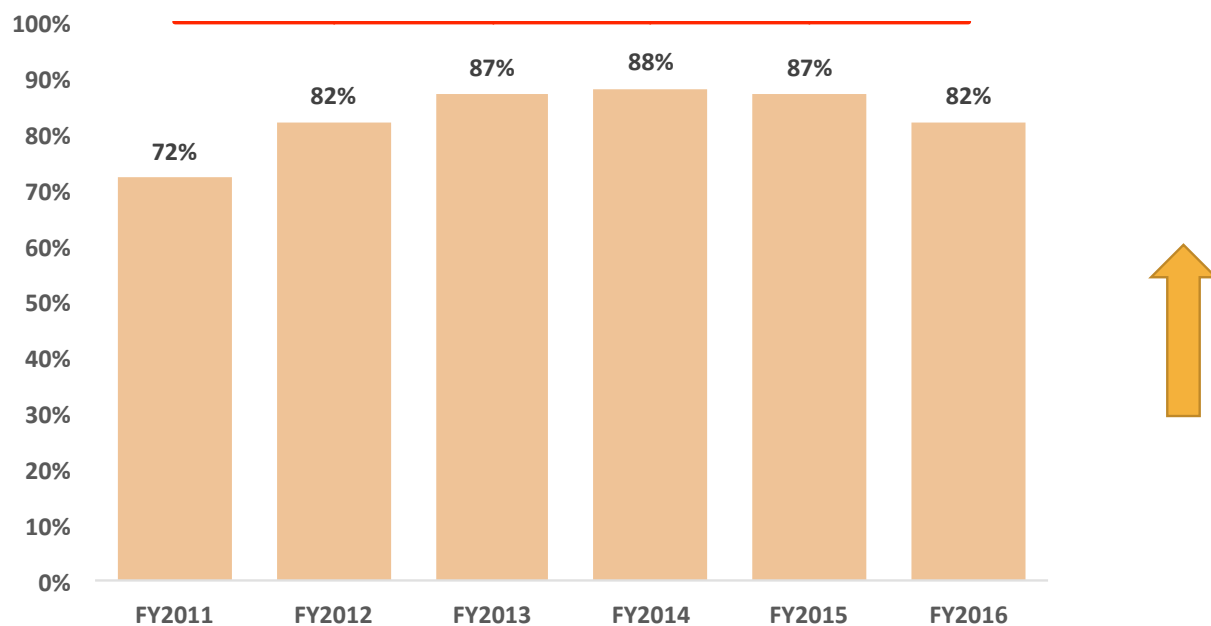
- Meeting with stakeholders in working group to implement a pre-application process with stakeholders to establish clear expectations;
- Additional reviewers have been added at the District level; and
- Implementing an electronic plan submittal process to facilitate plan exchange and reviews.

Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE 10.10

Percent of Roadway Access Permits Issued within 21 Days or Less

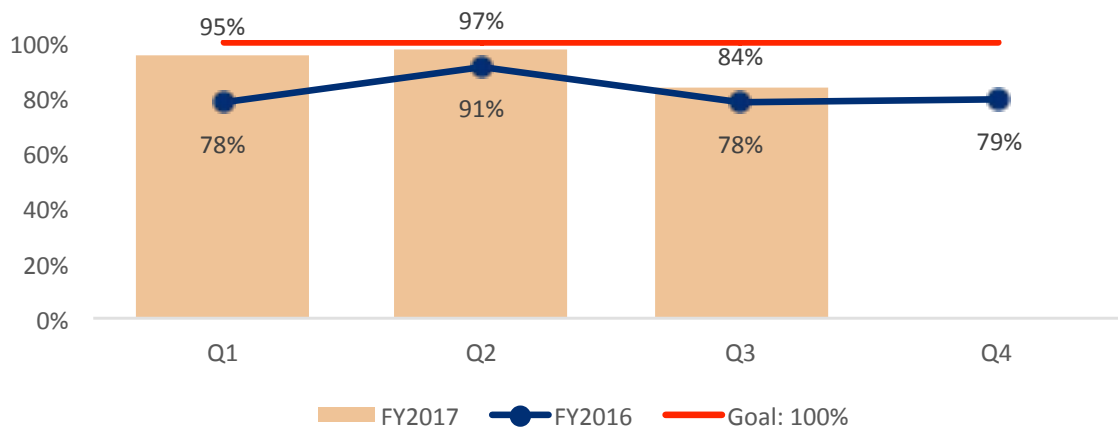
Chart 10.10.1: Percent of Permits Issued Within 21 Days FY2011-FY2016



PERFORMANCE MEASURE 10.10

Percent of Roadway Access Permits Issued within 21 Days or Less

Chart 10.10.2: Percent of Permits Issued within 21 Days FY2017



All Electronic Tolling (AET) – Collection of tolls at highway speeds using *E-ZPass* transponders or video tolling; no toll booths or cash collection.

Annual Attainment Report on Transportation System Performance – Pursuant to Transportation Article Section 2-103.1 of the Annotated Code of Maryland, the State is required to develop or update an annual performance report on the attainment of transportation goals and benchmarks in the Maryland Transportation Plan (MTP) and Consolidated Transportation Program (CTP). The Attainment Report must be presented annually to the Governor and General Assembly before they may consider the MTP and CTP.

Calendar Year (CY) – The period of 12 months beginning January 1 and ending December 31 of each reporting year.

Coordinated Highways Action Response Team (CHART) – CHART is an incident management system aimed at improving real-time travel conditions on Maryland's highway system. CHART is a joint effort of the State Highway Administration, Maryland Transportation Authority and the Maryland State Police, in cooperation with other federal, state and local agencies.

Consolidated Transportation Program (CTP) – A six-year program of capital projects, which is updated annually to add new projects and reflect changes in financial commitments.

Fiscal Year (FY) – A yearly accounting period covering the time frame between July 1 and June 30 of each reporting year.

MPA General Cargo – Foreign and domestic waterborne general cargo handled at the public (MPA) terminals.

Port of Baltimore Foreign Cargo – International (Foreign) cargo handled at public and private terminals within the Baltimore Port District. This includes bulk cargo (e.g., coal, sugar, petroleum, ore, etc. shipped in bulk) and all general cargo (e.g., miscellaneous goods shipped in various packaging).

MAA – Maryland Aviation Administration operates Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall) and Martin State Airport, a general aviation/reliever airport northeast of Baltimore.

MDTA – Maryland Transportation Authority operates and maintains the State's eight toll facilities.

Mode - Form of transportation used to move people or cargo (e.g., truck, rail, air).

MPA – Maryland Port Administration promotes the Port of Baltimore as a leading east coast hub for cargo and cruise activity.

MTA – Maryland Transit Administration provides Local Bus, Light Rail, Metro Rail, Paratransit services and regional services through commuter rail (MARC) and Commuter Bus, as well as grant funding and technical assistance.

MVA – Motor Vehicle Administration serves as the gateway to Maryland's transportation infrastructure, providing a host of services for drivers and vehicles, including registration, licensing and highway safety initiatives.

SHA – State Highway Administration manages the State's highway system which includes 17,117 lane miles of roads and 2,564 bridges

TBU – Transportation Business Unit

TSO – The Secretary's Office

Vehicle Miles of Travel (VMT) – A measurement of the total miles traveled by all vehicles.



Boyd K. Rutherford
Lt. Governor



Larry Hogan
Governor



Pete K. Rahn
Secretary of Transportation

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